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WESTMORLAND COUNTY COUNCIL

ANNUAL REPORT

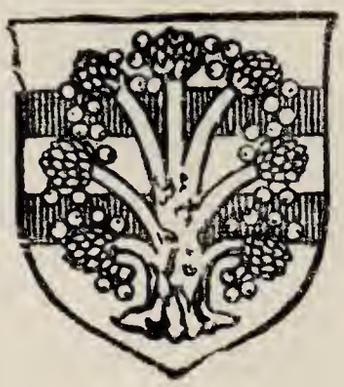
OF THE

COUNTY MEDICAL OFFICER OF HEALTH

THE YEAR 1956

Westmorland Gazette Ltd., Kendal

WESTMORLAND COUNTY COUNCIL



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COUNTY OF WESTMORLAND.

Public Health Department,

County Hall, Kendal.

November, 1957.

Mr. Chairman, Ladies and Gentlemen,

In preparing an introduction on the health of the County during the year 1956 I will endeavour to keep to my usual plan of being as brief as possible.

In regard to Vital Statistics, the population of the County shows litle change at 66,600. The Estimated Product of a penny rate is now £3,090

As usual in Westmorland, the birth rate is below the average for England and Wales and the death rate is higher. One rather more cheerful item in the vital statistics is that there were no deaths of mothers during the year from childbirth. In reviewing the causes of death, heart disease is still the outstanding cause of death, followed by cancer and cerebral hæmorrhage. Cancer deaths show a slight increase on previous years. I am glad to report that infectious disease has now shrunk to insignificance as a cause of death. Tuberculosis was responsible as a major agent in causing death, but it has now shrunk to insignificance, whilst measles and scarlet fever, once so important in causing deaths in young children, have caused no deaths during the year. The incidence of poliomyelitis seems to follow the type of weather we have in summer months, so that following the poor summer there were only two cases. There is still a rather disturbing amount of dysentery occurring. The Infant Mortality Rate is 17.3 as against 23.8 for England and Wales. This is really better than could ever have been expected at one time.

I think the best tribute I can pay to the other Services is that they function quietly and efficiently without the public being much aware of it. Under this heading I include:—

Ambulance Service.
Hospital Car Service.
Home Help and Nursing Services.
Welfare Foods.

A more detailed report on the Services will be found in the succeeding pages.

I have the honour to be,

Your obedient servant,

JOHN A. GUY,

County Medical Officer of Health.

PUBLIC HEALTH OFFICERS OF THE AUTHORITY IN 1956.

Name.	Qualifications.	Office.	Whole or Part Time.	Other Offices.
John A. Guy	M.D., D.P.H.	County Medical Officer	Whole	Principal School Medical Officer
F. M. Taylor	M.R.C.S., L.R.C.P., (Lond.)	Asst. County Medical Officer	Whole	School Medical Officer
J. Munro Campbell ..	M.B., Ch. B., D.P.H.	Tuberculosis Officer	Part	Physician Superintendent, Meathop Sanatorium
W. Hugh Morton	M.B., Ch.B., M.R.C.P., D.P.H.	Tuberculosis Officer	Part	Consultant Chest Physician
John Irvine .. .. Died 27/12/56	L.D.S.	Senior Dental Officer	Whole	Principal School Dental Officer
A. S. Carter	M.R.C.S., L.R.C.P., L.D.S.	Assist. Dental Officer	Whole	School Dental Officer
I. Fletcher	B.D.S.	Assist. Dental Officer	Whole	School Dental Officer
P. G. Holloway	.. .. ..	Mental Health Worker	Whole	
E. M. Thomas	S.R.N., S.C.M., H.V.Cert...	Superintendent Nursing Officer	Whole	

STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (in acres, land and inland water)	504,917
Population (Registrar-General's estimate of resident population, mid-1956)	66,600
Total Rateable Value as on 1st April, 1956	£780,550
Estimated product of a Penny Rate (General County) for the financial year 1956-57	£3,090

EXTRACTS FROM VITAL STATISTICS IN THE YEAR 1956.

	Total.	Males.	Females.
Live Births—Legitimate	817	412	405
Illegitimate	52	27	25
Total births ...	869	439	430

Birth-rate per 1,000 of the estimated resident population ... 13.8

Birth-rate, England and Wales, 15.7.

	Total.	Males.	Females.
Stillbirths	20	12	8

Rate per 1,000 total live and stillbirths, 22.5.

Stillbirth Rate, England and Wales, 23.0.

	Total.	Males.	Females.
Deaths	875	427	448

Death-rate per 1,000 of the estimated resident population, 12.3.

Death-rate, England and Wales, 11.7.

Death from Pregnancy, Childbirth or Abortions ... —

Rate per 1,000 total (live and still) births, for the purpose of calculating Maternal Mortality, nil.

Maternal Mortality Rate, England and Wales, per 1,000 total (live and still) births, 0.56.

Death-rate of Infants under one year of age:—

All infants, per 1,000 live births	17.26
Legitimate infants, per 1,000 legitimate live births ...	14.69
Illegitimate infants, per 1,000 illegitimate live births ...	57.69

Infant Death-rate, England and Wales, 23.8.

POPULATION.

DISTRICT.	Area in acres (Land and Inland Water).	Population. Registrar General's estimate Mid.-1956.
URBAN.		
Appleby	1,877	1,670
Lakes ...	49,917	5,480
Kendal	3,705	18,510
Windermere ...	9,723	6,410
RURAL.		
North Westmorland	288,688	16,360
South Westmorland	151,007	18,170
Westmorland ...	**504,917**	**66,600**

BIRTH RATE, 1955-56.

Birth Rate per 1,000 estimated resident population.

District.	1955.	1956.
Urban.		
Appleby	12.7	12.3
Kendal	13.9	13.3
Lakes	10.4	10.4
Windermere	10. 0	11.0
Rural.		
North Westmorland ..	16.3	17.0
South Westmorland ..	16.6	14.0
Westmorland	**14.4**	**13.8**
England & Wales	15.0	15.7

The Birth Rates in the table above are calculated using the comparability factor supplied for the purpose by the Registrar-General.

Live Births registered in the last five years were as follows :—

Year.	1952.	1953.	1954.	1955.	1956.
Number of births ...	948	937	863	910	869

DEATH-RATE, 1954, 1955 and 1956.

Death Rate per 1,000 estimated population.

District.	1954.	1955.	1956.
URBAN			
Appleby	11.8	11.8	16.3
Kendal	10.4	10.7	13.0
Lakes	8.7	12.4	12.6
Windermere	11.0	11.1	10.9
RURAL			
North Westmorland ...	10.8	11.1	13.1
South Westmorland ...	10.7	8.5	11.0
WESTMORLAND	10.6	10.4	12.3
ENGLAND and WALES ...	11.3	11.7	11.7

The Death-rates in this table are calculated using the comparability factor provided for the purpose by the Registrar-General.

The chief causes of death in Westmorland in 1954, 1955 and 1956 in order of maximum fatality in 1956 were as follows:—

	1954.	1955.	1956.
Heart Disease	301	271	314
Cancer	119	131	144
Cerebral Hæmorrhage	151	125	172
Other Circulatory Diseases	37	36	36
Violence (including accident) ...	31	40	34
Bronchitis	27	29	26
Digestive Diseases	11	12	21
Pneumonia	19	24	19
Tuberculosis of the Respiratory System	2	9	12
Other Respiratory Diseases	10	12	8
Nephritis	8	8	7

MATERNITY AND CHILD WELFARE

INFANTILE MORTALITY. (Under 1 year).

Rate per 1,000 Live Births.

District.	1954.	1955.	1956.
URBAN			
Appleby	52.6	50.0	52.6
Kendal	16.9	38.9	20.2
Lakes	—	18.2	18.2
Windermere	—	33.3	30.8
RURAL			
North Westmorland	15.8	28.9	20.0
South Westmorland	33.8	14.5	4.3
WESTMORLAND	19.7	27.5	17.3
ENGLAND and WALES	25.5	24.9	23.8

ILLEGITIMATE INFANT DEATH RATE.

Rate per 1,000 Illegitimate Live Births.

	1954.	1955.	1956.
WESTMORLAND	58.8	23.3	57.7

Casuses of Death in Infants under one year in 1956:—

Congenital heart condition	3
Prematurity	2
Pneumonia	2
Asphixia	1
Acute bronchitis	1
Æsophago: pharyngeal fistula	1
Patent ductus anteriosus	1
Leukæmia	1
Spina bifida	1
Miningitis	1
Intestinal obstruction	1

CARE OF EXPECTANT AND NURSING MOTHERS AND YOUNG CHILDREN

There has been no Local Health Authority ante-natal clinic in the County since the only one was closed in 1949 owing to the small use made of it. A weekly specialist clinic is held at the County Hospital. Assistance is given in a very few general practitioners' surgeries by midwives; arrangements are made locally by the practitioners and midwives for their mutual convenience. The Local Health Authority has no arrangements for blood testing the expectant mothers and the extent to which practitioners carry this out is not known to me. I am, however, of the opinion that it is not done as a routine measure in every case. There is one clinic in Kendal where mothercraft training is undertaken; this of course would be a useful adjunct to any ante-natal clinic. The only other mothercraft training which I am aware of is given by the district nurse/midwives in the course of their visits. Maternity outfits are supplied by the Westmorland County Council to expectant mothers and are chiefly distributed via the district nurse.

There are specialist obstetric clinics at the various hospitals serving the area (Cumberland Infirmary, Westmorland County Hospital, Lancaster Royal Infirmary); the Local Health Authority has nothing to do with these clinics. In the case of expectant mothers booking for confinement at the Penrith Maternity Home, midwives employed by the Local Health Authority are, by arrangement with the Hospital Management Committee, responsible for the ante-natal supervision. This facility has been offered to the other Hospitals providing maternity accommodation but has not been accepted.

The very early discharge of mothers and babies from Maternity Homes and Hospitals renders prompt notification of discharge most essential. In some cases, however, women who have been confined are discovered some time after they have come home from hospital by hearsay information reaching the district nurse. This is most unsatisfactory and a breach of the Rules of the Central Midwives Board.

DOMICILIARY MIDWIFERY

The midwifery service is provided directly by the Local Health Authority, who took into employment on the appointed day the staff of the District Nursing Associations which had previously undertaken this work. There are 36 midwives; the Assistant County Medical

Officer has been appointed medical supervisor of midwives and the Superintendent Nursing Officer has been appointed non-medical supervisor. These two officers are responsible for the supervision not only of midwives employed by the Authority but those working in Hospitals and Nursing Homes. There are no midwives engaged in private domiciliary practice. All except two of the midwives employed by the Local Health Authority are qualified to administer gas and air, and are provided with the necessary apparatus, and 28 of them are authorised to use pethidine. Midwives who have booked cases undertake the ante-natal care; where cases have been booked with medical practitioners and are to be confined at home they usually have ante-natal care by their own doctors. In one or two instances the practitioner has found it convenient to have something in the nature of a small private ante-natal clinic to which appropriate midwives who will be present at the confinements in the capacity of maternity nurse are invited to be present. The number of cases booked to be delivered by the midwife alone has seriously declined in Westmorland since the passing of the National Health Service Act. Arrangements have been made for the Local Health Authority to assist in selecting women who are to be confined in the Penrith Maternity Home; however, owing to the decrease in the birth rate there has been no difficulty whatsoever in obtaining beds for those cases wishing to go to maternity homes or hospitals. Local courses of lectures to all district nurse/midwives are arranged annually; in addition midwives are sent on approved refresher courses arranged by the Royal College of Midwives at the expense of the Local Health Authority, during which time they receive full salary.

The Statistical Tables at the end of this Report are a simplified version of the Annual Return to the Ministry.

Domiciliary Confinements.

	1954	1955	1956
Number of cases doctor booked ...	168	151	121
Number of cases doctor not booked	9	19	22
	177	170	143

HEALTH VISITING

Apart from two full-time health visitors and one tuberculosis visitor employed in Kendal, health visiting is undertaken by district nurse/midwives, of whom 15 hold the health visitors certificate, the rest being employed under dispensation granted by the Ministry of Health.

To enable unqualified nurses to obtain the health visitors certificate a scholarship is now awarded each year, under which the cost of training and maintenance is defrayed by the Local Health Authority, the nurse on her part entering into a contract to serve, after qualification for a minimum of two years; the value of the scholarship has also been increased in an effort to attract candidates. A series of lectures is held locally during each year, and selected nurses are sent in rotation on refresher courses. There is no definite link between the health visitors services, medical practitioners and local hospitals, although some of the younger practitioners in the County are making more use of the health visitors. I do not, however, envisage that any real integration can take place until there are one or more Health Centres.

	1954.	1955.	1956.
Total Health Visits to Infants under 1 year	10,725	11,413	10,399
Total Health Visits to Children 1 to 5 years	16,438	20,240	16,440

HOME NURSING

The Home Nursing Service is provided by the district-nurse/midwife/health visitors employed directly by the Local Health Authority and is under the day-to-day control of the Superintendent Nursing Officer; there is more co-operation with general practitioners in the home nursing field by reason of the fact that although nurses may be called in by patients the nurses are instructed that they must not continue in attendance unless the medical practitioner has also been called in and given directions for the treatment of the case. Contact between the practitioners and the nurses is a direct one and does not come through the Public Health Office. There is very little liaison with hospitals, although occasional requests for dressings or injections are received.

No specific night duty nurses are employed, but all nurses are available day or night in cases of real necessity and no difficulty has been experienced in this direction.

The Council awards one scholarship for District Training per year, but there are no arrangements for district training within this County. An annual series of lectures is arranged which includes topics specifically relating to home nursing.

DIPHTHERIA IMMUNISATION

The treatment is given either by the County Council medical staff or the general practitioners, according as the parents choose, at or before the first birthday, whilst all parents are urged to consent to their children receiving a reinforcing dose on attaining the age of five years.

In Kendal, which is the only town of any size in Westmorland, an immunisation clinic is held at monthly intervals throughout the year; booster injections of diphtheria antigen are given at the above-mentioned clinic and also at special clinics arranged from time to time throughout the County, and in other cases following school medical inspection. Arrangements for immunisation against whooping cough are similar to the arrangements for diphtheria immunisation; the age at which immunisation is first done is approximately one year. Private practitioners throughout Westmorland have been encouraged to join in the campaign against diphtheria and whooping cough by taking part in the innoculation of young children. This has become increasingly popular amongst the doctors and has led to some interesting observations.

The success of this scheme may be judged from the fact that for the ninth consecutive year there were no cases of diphtheria notified amongst residents of the County.

It is generally held that, to provide the required security against diphtheria, about 75 per cent. of the children of school age should have been immunised within the last 5 years, and on this basis a percentage of children protected of 46.6% leaves room for much improvement.

The following tables show the detailed statistics in the form in which they are now required by the Ministry of Health.

TABLE A.

Number of children who received a full course of immunisation during the year :—

	Age at Date of Final Injection :			
	Under 1	1 to 4	5 to 14	Total.
Primary	321	347	135	803
Reinforcing	—	36	409	445

TABLE B.

Number of children at 31-12-56 who had completed a course of immunisation prior to that date :—

Age at 31-12 56.	Under 1	1-4 years	5-9 years	10-14 years	Total under
Born in Year	1956.	1952-1955.	1947-1951.	1942-1946.	15 years.
Last complete course of injections :					
(a) 1952-56 ...	87	2,455	3,554	672	6,768
(b) 1951 or earlier ...	—	—	1,190	3,013	4,203
(c) Est. Child Population	870	3,630	10,000		14,500
Immunity Index $^{100x}a/c$	10%	67.6%	42.2%		46.6%

VACCINATION AGAINST SMALLPOX

It is the duty of the Health Visitors to urge all parents to have their children vaccinated as soon as practicable after birth, and all medical practitioners in the County were given an opportunity of carrying out this treatment under the County Council's arrangements. A record of the treatment is usually sent to the County Medical Officer, and fees are payable in respect of each report received.

Lymph is supplied free through the Public Health Laboratory Service, and the Council has also taken power, in its proposals, to make such special arrangements as may be necessary in the event of a threatened epidemic of smallpox.

Details of vaccinations carried out during 1956 are:—

Age at date of vaccination.	Under 1 year.	1 year.	2-4 years.	5-14 years.	15 yrs. and over.	Total.
No. vaccinated ...	494	26	19	22	38	599
No. re-vaccinated	—	—	2	5	55	62
					Total ...	661

Of 869 children born in the County during the year only 494 are known to have been vaccinated. This figure, 57 per cent., compares with 65 per cent. in 1954, 51 per cent. in 1955 and 50 per cent., 47 per cent. and 31 per cent. in 1953, 1952 and 1951 respectively. It cannot, however, be viewed with equanimity in view of the increased risk of the introduction of smallpox infection by reason of the increased speed and range of foreign travel.

VACCINATION AGAINST POLIOMYELITIS.

The Poliomyelitis Vaccination Scheme announced by the Ministry of Health in January, 1956, is administered by the County Council as Local Health Authority and covers children born in the years 1947 to 1954 inclusive. In the country areas particularly, it is only by using the schools as clinics that it is possible to deal with the numbers involved, with the staff available for this work.

I would like to take this opportunity of recording my thanks to the teachers for their ready co-operation not only in connection with my visits to the schools to cary out the vaccination, but also for their valuable assistance in verifying the addresses of the children concerned, so as to enable the parent of each child to be invited to consent to treatment.

It is estimated that approximately 7,500 consent forms were posted to the parents of children in the prescribed age group, and consent was received in respect of 3,325 children, before the registration procedure formally closed at the end of March, 1956. Limited supplies of vaccine became available during May and June which permitted of the giving of two doses each to 22 children and one dose each to a further 276; the scheme was then suspended until a further supply, sufficient for approximately 300 doses, was received at the end of November, all of which was used before the end of the year.

It is much too soon to express any view, based on our own experience, on the degree of protection afford by this vaccine; it is pleasing to report that there have been no reactions worthy of comment.

INFANT WELFARE CENTRES

The Local Health Authority provides 17 infant welfare centres, three of which are staffed by a general practitioner, the remainder being attended by Local Health Authority Medical Officers. The clinics range in frequency from once weekly to once per month; Kendal is the only clinic which operates weekly, whilst two others operate fortnightly. The Local Health Authority provides no specialist's clinics; there are however ophthalmic, orthopaedic, paediatric and ear, nose and throat clinics run by the Regional Hospital Board to which mothers and children can have access. The infant welfare clinics are made good use of by the mothers; the chief use is advice on general infant hygiene and feeding. Owing to the scattered nature of the population the clinics tend to be small but one feels that there is a definite need even for a small clinic.

In addition to the arrangements outlined below for the distribution of Welfare Foods the Local Health Authority has also made other dried milks and nutrients available at the Kendal Infant Welfare Centre, which acts as a mother centre to all the other clinics.

Details of Infant Welfare Centres in operation at the end of the year are given below.

Area.	*Centre held at:*	*Frequency of Sessions.*
Ambleside ..	Y.M.C.A. ..	Monthly
Appleby ..	Old First Aid Post ..	Fortnightly
Bampton ..	Memorial Hall ..	Monthly
Bowness-on-W'mere ..	Rayrigg Room ..	„
Brough ..	Oddfellows Hall ..	„
Burneside ..	Bryce Institute ..	„
Kendal ..	School Clinic, Stramongate ..	Weekly
Kirkby Stephen ..	Friends' Meeting House ..	Fortnightly
Milnthorpe ..	Institute Annexe ..	Monthly
Shap ..	Methodist Chapel Hall ..	„
Staveley ..	Working Men's Institute ..	„
Tebay ..	Methodist Chapel Hall ..	„
Temple Sowerby ..	Church Hall ..	„
Warcop ..	R.A.C. Camp ..	„
Windermere ..	Y.M.C.A. ..	„
Wickersgill ..	Social Centre ..	„

Once again thanks are due to the local branches of the British Red Cross Society, the St. John Organisation and all other voluntary workers for their assistance in the running of the Centres.

Attendances at Centres

	1954.	1955.	1956.
Under 1 year	2,736	2,968	3,621
Over 1 year	3,166	3,081	3,077
Average per session ...	19.4	18.4	18.0

DISTRIBUTION OF WELFARE FOODS

The Council is responsible for the distribution, to expectant and nursing mothers and children under 5 years, of Welfare Foods, previously a function of the local offices of the Ministry of Food.

A main centre for this work was established at Stramongate School Clinic, and other subsidiary centres throughout the county; some at Welfare Centres, others at the homes of District Nurses, others run by the various voluntary associations, and others by local shopkeepers. To all who have taken a hand in this work, the thanks of the authority and of the mothers are due.

The quantities distributed during 1956 were:—

Period	National Dried Milk	Cod Liver Oil	Vitamin Tablets	Orange Juice
	Tins.	Bottles	Packets	Bottles
1st Quarter ...	9,304	2,240	843	9,444
2nd Quarter ...	7,827	1,577	717	10,428
3rd Quarter ...	8,071	1,677	885	10,676
4th Quarter ...	7,906	2,182	806	9,531
Total for year	33,108	7,676	3,251	40,079

UNMARRIED MOTHERS AND THEIR CHILDREN

The Superintendent Nursing Officer is now responsible for investigating and advising these cases, but it should be noted that by no means all unmarried expectant mothers come to her notice; some are dealt with entirely by the Diocesan Moral Welfare Workers, whilst in other cases the girl's family are able, and willing, to make all necessary arrangements for the confinement and subsequent care of the baby.

Births of Illegitimate Children notified	21
Confinements in:—	
Mother's own home	2
St. Monica's Maternity Home	3
Helme Chase Maternity Home	9
Private Nursing Homes	1
Coledale Hall, Carlisle	—
Penrith Maternity Home	3
City Maternity Hospital, Carlisle	1
Brettargh Holt Maternity Home	—
Other addresses	2
Disposal of Infants:—	
Mother keeping baby	14
Baby in care of grandmother	6
Baby died	1

Institutional accommodation for these cases is provided under arrangements made with the undermentioned voluntary homes :—

St. Monica's Maternity Home, Kendal

The Home possesses 23 maternity beds and during the year 54 maternity cases were admitted, eight of whom were domiciled in Westmorland.

Sacred Heart Maternity Home, Brettargh Holt, Kendal

This Home has 40 maternity beds and, during the year, 127 maternity cases were admitted, for none of whom the Westmorland County Council were asked to assume financial liability.

In the case of both of the Homes the apparently low number of admissions relative to the number of beds is largely explained by the fact that patients are admitted at least a month before confinement and retained for at least two months afterwards, so as to afford an opportunity for the making of arrangements for the care of the babies.

CARE OF PREMATURE INFANTS.

The following table gives details of premature infants born to Westmorland mothers during 1956:—

Born in Hospital:		
Stillbirths		13
Live Births		39
Died within 24 hours of birth ...	2	
Survived 28 days	37	

Born at Home:		
Stillbirths		—
Live Births nursed entirely at home		2
Died within 24 hours of birth ...	—	
Survived 28 days	2	
Live Births transferred to Hospital ...	4	
Died within 24 hours of birth ...	—	
Survived 28 days	2	
Born in Nursing Homes:		
Stillbirths		1
Live Births		—
Died within 24 hours of birth ...	—	
Survived 28 days	—	

REGISTRATION OF NURSING HOMES

(Sections 187 to 194 of the Public Health Act, 1936)

There were five registered homes at the end of the year providing beds for 67 maternity patients and 24 other patients. They have been inspected at regular intervals.

DENTAL TREATMENT FOR EXPECTANT AND NURSING MOTHERS AND YOUNG CHILDREN

TABLE A.

	Examined.	Requiring Treatment.	Treated.	Made Dentally fit.
Expectant and Nursing Mothers	17	16	15	13
Children under 5 years ..	56	47	47	42

TABLE B.

	Scaling and Gum Treatment.	Fillings.	Crown Inlay. AgNO3.	Crown Inlay.	Extract.	Gen. Anaes.	Dentures Full.	Dentures Part.	X-ray.
Expectant and Nursing Mothers	6	15	—	—	68	13	7	4	—
Children under 5 years ..	—	12	22	—	78	44	—	—	—

DOMESTIC HELP SERVICE

When preparing their proposals under the National Health Service Act the Council, on the advice of the Minister, took advantage of their power under Section 29 of the Act, to provide a Domestic Help Service, available as far as workers can be obtained to the categories of household specified in the Act. Statistical details are shown in Table II on page 73.

The detailed day-to-day administration of this service is carried out by the Superintendent Nursing Officer and her Deputy. The majority of the requests for help are met, although in one or two rural areas difficulty is experienced in recruiting workers, partly due to the fact that only very casual work can be offered. In areas where fairly full time and regular employment can be offered there is much less difficulty in recruitment. The service has expanded steadily, the cost having just about doubled, since the first complete year's working under the present scheme. The greatest number of cases helped are old and infirm people, mostly living alone. To maintain the efficient and economical running of the service a considerable amount of visiting of patients receiving help is required for the purpose of adjusting the amount of help given. The service has attracted a good type of woman and many have been in it since it was formed in 1948. It is felt that this service is one of the most vital parts of the National Health Service and that, if it were allowed to expand, it would be a means not only of ensuring the earlier return home of hospital patients but often the avoidance of the removal to homes and hostels of many aged and infirm, though not necessarily ill, people.

MIDWIVES ACT

Total number of Midwives practising at the end of the year		57
District Nurse Midwives		37
Midwives in Institutions and in Private Practice ... viz.:—	20	
(a) Westmorland County Hospital		3
(b) Helme Chase Maternity Home		8
(c) St. Monica's Maternity Home, Kendal ...		3
(d) Brettargh Holt		5
(e) Private Practice Nursing Homes		1

Midwives Notification Forms received during 1956 were as follows:—

Notification of—	
Sending for Medical Aid	78
Artificial Feeding	140
Stillbirth and Death	22
Having laid out a dead body	12
Liability to be a source of infection ...	8

Gas Air Analgesia

The Council's proposals for the provision of a midwifery service, approved by the Minister, require that all midwives shall be trained and equipped for the induction of analgesia, and the stage has now been reached where all midwives, with the exception of two of the older ones, are now trained. Should any newly-appointed midwife be untrained in analgesia, steps are taken to provide a training course at the earliest possible opportunity.

During the year midwives have induced analgesia in 106 domiciliary cases, and at the end of the year 34 District Nurse Midwives were qualified for the induction of gas-air analgesia.

CARE OF BLIND PERSONS

Under the National Assistance Act, 1948, the County Council no longer has the power to give financial assistance to blind persons, but it is required to "make arrangements for promoting the welfare" not only of blind persons but also of the partially-sighted. Administrative responsibility for this work devolves upon the Council's Social Welfare Department, but the County Medical Officer is responsible for advising the Committee on "all matters relating to health or medical services arising in connection with the Council's functions under the Act . . . . including, in particular, arrangements for the medical examination of applicants for registration as blind persons."

All such applications are referred for examination to one of the specialist ophthalmologists with whom the Council has entered into arrangements for this work, and during 1956 30 such cases were referred, of whom 24 were certified as blind and six as partially sighted.

The total number of persons on the Council's register on 31st December, 1956, was 138 blind and eight partially sighted.

The following tables relating to the causes of blindness and treatment obtained for certain conditions is included at the request of the Ministry of Health.

A.—Follow-up of Registered Blind and Partially-Sighted Persons.

	Cause of Disability.			
	Cataract.	Glaucoma.	Retrolental Fibroplasia.	Others.
(i) No. of cases registered during the year in respect of which paragraph (c) of Form B.D.8 recommends:				
(a) No treatment ...	9	1	—	6
(b) Treatment (medical, surgical or optical)	7	5	—	2
(ii) No. of cases at (i) (b) above which on follow-up have received treatment ...	4	4	—	2

B.—Ophthalmia Neonatorum.

(i) Total number of cases notified during the year ...	—
(ii) No. of cases in which :	
(a) Vision lost	—
(b) Vision impaired	—
(c) Treatment continuing at end of year ...	—

MENTAL HEALTH

As advised in Ministry of Health Circular 100/47, the Health Committee has appointed a Mental Health Sub-Committee to deal with its functions, under Section 57 of the National Health Service Act, and, so far as they relate to Mental Defectives and Persons of Unsound Mind, under Section 28 of that Act.

The Sub-Committee is constituted as follows :—

Chairman and Vice-Chairman of the Health Committee	2
Members of the Health Committee (being members of the County Council)	10
Members of the Management Committees of Mental Hospitals and Mental Deficiency Institutions ...	4
Others (whether Members of the Health Committee, or the County Council, or neither)	3

On the 5th July, 1948, this Authority took over from the Cumberland, Westmorland and Carlisle Joint Committee for the care of the Mentally Defective the duty of ascertaining what defectives in the area were subject to be dealt with under the Acts, and the duty of providing supervision, care, training and occupation for defectives living in the community. Four officers have been authorised to place persons in a place of safety, under Section 15 of the Mental Deficiency Act, 1913, of whom two have also been authorised to present petitions under the Act.

The County Medical Officer and the Assistant County Medical Officer have each been approved by the Local Health Authority under Section 3 of the Mental Deficiency Act, 1913, for the purposes of giving certificates relating to Mental Defectives. The Authority also employ a Mental Health Worker.

The Authority has undertaken, on behalf of the Regional Hospital Board, the supervision of cases on licence from Institutions who are resident within the area, and also the domiciliary visiting, as and when required, for patients in Institutions and Homes whose parents and friends are resident in Westmorland. The Mental Health Worker does any visiting which may be required on behalf of patients in or discharged from the various Mental Hospitals.

No duties have been delegated to any voluntary organisation, but the authority makes a grant to the National Association for Mental Health, from which organisation help is sought in difficult cases.

The Council's Mental Health Worker is always available to advise and assist in cases of mental illness, and a psychiatric clinic staffed by the Medical Staff of Lancaster Moor Hospital is held at the Westmorland County Hospital, Kendal; the Board has now appointed an additional consultant psychiatrist for the northern part of its area, and this officer has assumed responsibilty for this outpatient work.

The Council's duly authorised officers are available not only for the removal to hospital of certified cases, but also to assist in obtaining admission of "voluntary" and "temporary" cases, and to advise on the best means of dealing with any case of mental illness.

Ascertainment of mental defectives is in general carried out by the County Medical Officer of Health and the Assistant County Medical Officer, and most cases coming to the notice of the Local Health Authority are referred to them by the Local Education Authority.

Occupation Centre

An Occupation Centre was opened in Kendal early in 1949 for one day each week for adult male and female patients. The numbers attending were, as expected in such a sparsely populated area, small, but progress was made in the teaching of rugmaking, embroidery, reading, writing, etc.

Both patients and their relatives are very enthusiastic regarding the progress made, and the latter appreciate being relieved of the responsibility for looking after the patients for a few hours each week. The standard of work in some cases was much higher than had been expected, whilst a significant feature, particularly in view of the difficulty of obtaining vacancies in Institutions, is the relief given to the parents if the defectives can be cared for in the Centre for one, two or three days per week.

As a result of the progress so made the Centre was opened for a further day per week for young defectives of both sexes and has now been extended to a third day, whilst the appointment of an Assistant Supervisor has facilitated the admission of more troublesome cases.

A simplified version of the Annual Return to the Ministry, given on pages 73 and 78 of this Report, shows the number of cases for which the Council was responsible at the end of the year.

AMBULANCE SERVICE

As in the previous years back to 1948, the Ambulance and Sitting Case Car Service has functioned efficiently. The two services are run separately; the Ambulance Service is under the direct control of the Ambulance Officer who is also the Chief Fire Officer, while the Sitting Case Car Service is run directly by the Health Department.

Details of the Sitting Case Car work done during the year, and for comparison figures for the preceding four years are given below:

Year.	No. of Patients.	No. of Journeys.	Total Mileage.
1956	16,511	6,265	244,321
1955	17,594	6,865	244,703
1954	17,204	5,975	246,400
1953	19,154	6,587	275,808
1952	14,579	5,908	216,299

Comparable figures for the Ambulances will be found in the following Report of the Chief Ambulance Officer, for which I am indebted to Mr. Haseman.

ANNUAL REPORT OF THE COUNTY AMBULANCE OFFICER.

I beg to make my Annual Report for the year ending 31st December, 1956, on the activities of the County Ambulance Service.

The general set-up remains the same, under which circumstances the service has functioned very satisfactorily.

It will be seen that the number of miles run is much lower than shown in my previous annual reports.

During the year some minor alterations have been made regarding the pay and conditions of some of the volunteer personnel attached to out-stations. Otherwise, conditions are as they were and the number of ambulances operating is still seven.

They are stationed at the following depots:—

Depot.	Number of Ambulances.	Method of Manning.
Kendal ...	4 ...	Whole-time (5) augmented by one part-time female attendant and St. John Ambulance Brigade personnel.
Ambleside ...	1 ...	Part-time personnel.
Appleby ...	1 ...	Part-time personnel.
Kirkby Stephen	1 ...	Part-time personnel.

By agreement with the Cumberland County Council the Penrith Ambulance Service gives cover to certain parishes in the north of the county.

Ambulances.

An order was placed during the year for a new Bedford-Lomas ambulance to replace the existing one at Kirkby Stephen. This vehicle is due for delivery at any time now. Whilst the interior fittings are standard, some slight alterations in size, etc., have been made necessary, so as to enable this ambulance to use the existing garage.

The vehicle at Appleby during the year has been repainted and overhauled.

AMBULANCES NOW IN COMMISSION

Depot.	Make.	Year.	Mileage 31st Dec. 1956.	Condition.
Kendal	Bedford (CEC 505)	1954	39,744	Good
Kendal	Bedford (BEC 672)	1953	78,515	Good
Kendal	Bedford (AEC 905)	1951	93,377	Good
Appleby	Bedford (AEC 539)	1951	76,223	Good
Kendal	Bedford (JM 9344)	1950	83,393	Good
Kirkby Stephen	Bedford (JM 8868)	1949	100,814	Poor
Ambleside	Morris (JM 7667)	1948	41,365	Good

Ambulance Calls.

Station.	No.	Patients Carried : Infectious	Accidents	Maternity	Others.	Total Patients.	Patient Carrying Journeys.	Abortive & Service Journeys.	Total Journeys.	Mileage.
Kendal	4	40	226	80	2,039	2,385	1,927	23	1,950	48,486
Ambleside	1	—	33	6	62	101	93	3	96	3,423
Appleby	1	—	35	29	308	372	165	7	172	12,263
Kirkby Stephen	1	—	28	14	137	179	126	2	128	11,028
	7	40	322	129	2,546	3,037	2,311	35	2,346	75,200
Date:—										
1954	7	27	239	148	2,680	3,094	2,279	29	2,308	81,025
1955	7	38	311	107	2,823	3,279	2,608	14	2,622	84,271

	1956.	1955.	1954.
Average miles per journey ...	32.05	32.14	35.11
Kendal	24.86	25.07	26.46
Ambleside	35.66	36.56	39.67
Appleby	71.30	64.24	70.32
Kirkby Stephen	86.16	86.60	81.71

As can be seen from the above the Kendal depot carries the greatest amount of work and, wherever possible, carries out any long-distance removals.

My previous remarks still apply, i.e., mileage and not age must be the deciding factor in deciding replacements of vehicles

Arrangements made with the garages, i.e., Kirkby Stephen, Appleby and Ambleside, for servicing, etc., of the respective vehicles continue very satisfactorily, whilst all repairs to those at Kendal which can be carried out (within our limited capacity) are very well executed by the Fire Brigade mechanic.

On behalf of the Lancashire County Council 40 journeys were carried out with a mileage of 1,561.

Personnel.

Excellent work has again been done by the volunteers who man the ambulances at the out-stations. The Kendal Division of the St. John Ambulance Brigade continues to provide, when required during the night time, an attendant, and at all times has been most helpful.

The whole-time staff have at all times been most co-operative, often during their off-duty periods at some inconvenience to themselves.

The general efficiency of all staff has been much admired by those unfortunate enough to require the ambulance service.

Accommodation.

There has been no change during the year with reference to the garaging of ambulances at Kendal. Fire Service vehicles still remain in the open in all weathers. These could be put under cover if the ambulances had their own garage facilities.

Wireless.

It is hoped that the joint wireless scheme will materialise. In an area such as Westmorland it could be most useful and give greater efficiency to the service.

General.

There has been no special incident or circumstance during the year to call for any special reference. At all times it has been our endeavour to give the service which is expected.

Numerous letters of thanks have been received appreciating the manner in which removals have been carried out. These letters reflect very favourably on the manner in which the staff carry out their duties.

Fortunately, we have a very efficient and willing staff, otherwise with such a few whole-time personnel it would often be impossible to render the service that is given.

I would like to take this opportunity of recording my personal thanks to all concerned for their co-operation at all times. The co-ordination by the doctors and other Authorities has to a great extent enabled the removal of more than one patient at a time, thereby making a saving in running costs.

To the Fire Service personnel, i.e., the Control Room attendant, my clerk and the Brigade mechanic, who do so much for the Ambulance Service, I am again grateful.

In conclusion, I again thank the County Medical Officer and his staff for their help and advice.

To you, Sir, and Members of the Health Committee I wish to record my thanks for your help and guidance, which has always been so readily available.

T. HASEMAN,

Ambulance Officer.

ANNUAL REPORT OF THE COUNTY ANALYST.

1. During the year ended 31st December, 1956, I have analysed 194 samples of Food and Drugs submitted by the Sampling Officers appointed for the County of Westmorland, under the Food and Drugs Act, 1955.

2. Samples of genuine quality total 152, which have been certified in this respect; seven samples were reported as being of genuine quality but below standard; 27 were adulterated or below standard, or disclosed some irregularity; two were of doubtful quality; whilst six samples taken as Appeal to Cow samples were also the subject of report.

3. The outcome of the analysis of all samples submitted during 1956, including those samples which were not found to be of genuine quality or as showing some irregularity, is given in the following table:—

Number of Milk samples received for analysis	54
Number of samples other than Milk received for analysis	140
	194

This indicates that during the year ended the 31st December, 1956, there was a decrease of 67 samples received for analysis, as compared with the year ended the 31st December, 1955, when 261 samples were submitted.

Number of samples adulterated or below standard or showing some irregularity ...	27
Number of samples of genuine quality but below standard	7
Number of Informal samples	16
Number of Appeal samples	6

4. **Milk.**—Of the 54 samples of Milk received during the 12 months ended the 31st December, 1956, 23 were of genuine quality, complying with the requirements of the Sale of Milk Regulations, 1939, in which were also included three samples of Jersey Milk and one sample of Channel Island Milk—in these cases the minimum fat content is 4%; the remaining 31 samples comprised seven, which were reported as

being of genuine quality but below standard, two doubtful, two deficient in Non-fatty solids, 13 deficient in Fat and one sample deficient in both Non-fatty solids and Fat. In connection with deficient samples six Appeal samples were received for analysis, five of which were genuine in every respect and afforded freezing points within the accepted limits for genuine unwatered milk, while one sample was slightly deficient in Fat, the actual figure for Fat being 2.9%, but here again both the Non-fatty solids and the freezing point were perfectly normal.

5. **Other Samples.**—During the year 13 samples of Beef Sausages and 17 samples of Pork Sausages were submitted for analysis and of the Beef Sausages only one fell below 50% of meat and that sample afforded 49.30%, which was regarded as being of genuine quality. With regard to the Pork Sausages, five samples disclosed meat deficiencies ranging from 3% to 18.5% when compared with the figure of 65% for meat in Pork Sausages, which appears to be very satisfactorily maintained.

During the year two samples of Rum Butter were reported as containing fat other than butter fat and one sample contained Proof Spirit equivalent to only 0.54% of Rum.

An article described as Rum Butter Candy was found to contain no more than a trace of alcohol, but under the outer cover and printed on the carton containing the sweet it was referred to as Rum and Butter Flavour Candy, while another sample described as Chocolate Rum Truffles contained alchohol which was equivalent to no more than 0.35% of Rum, and in this case the article should have been described as Chocolate Rum Flavour Truffles.

Another example of misleading description was that of a sample described as Deep Browned Beans with Tomato Sauce and Pork—this was an Informal sample and in the whole of the contents of the tin, which was unopened when received, there was one piece of pork which corresponded to 2% of the whole of the contents of the container, and as the word "PORK" appeared most prominently on the label the view was expressed that it was a misleading description.

CYRIL J. H. STOCK,

County Analyst.

FOOD AND DRUGS ACTS, 1955
ANNUAL REPORT OF THE CHIEF SAMPLING OFFICER FOR THE YEAR 1956.

This report covers the period 1st January to 31st December, 1956, with reference to the provisions of the Food and Drugs Acts relating to the composition and labelling of foods and drugs and also deals with ancillary duties allied to those parts of the Food and Drugs Acts for which the County Council is responsible.

The administrative area includes the whole of Westmorland.

Continuing previous arrangements, particulars of sampling duties undertaken in the Borough of Kendal are extracted quarterly and sent to the Town Clerk.

1. In the period under review the Sampling Officers made 982 preliminary sorting tests or Gerber tests from milk in transit to collecting stations or in the course of delivery to customers or from milk supplied to schools, in addition to which 195 samples comprising 57 of milk and 138 others were submitted to the Public Analyst, who found that 39 samples were below standard, adulterated or irregular in some other respect.

2. **Analysed by the Public Analyst.**

Milk Samples.

It will be appreciated that one effect of selective sampling, following up preliminary sorting tests on milk samples, is to nullify any significance in what would otherwise be regarded as a high proportion of unsatisfactory samples in the following table:

MILK SAMPLES.

	Satisfactory.	Below Standard.	Doubtful.	Added Water.	Total.
Purchased from Retailer ...	19	16	2	2	39
Obtained from churns in transit	2	4	—	—	6
"Follow up" or "Reference"	5	1	—	—	6
"Appeal to Cow"	5	1	—	—	6
	31	22	2	2	57

The 22 samples classified as "Below Standard" comprised seven genuine milk with a low content of non-fatty solids; 14 deficient in fat, including one "Appeal to Cow" sample. When judged by the limit of 3% for fat in milk set up in the Sale of Milk Regulations, 1939, two of the samples were deficient to the extent of 21% and 23.4%. The remaining samples were deficient in extents ranging from about 1% to 10%. One slightly deficient in fat and non-fatty solids with a freezing point indicating the deficiency to be due to some cause other than the addition of water.

Two samples were classified as "Doubtful" by reason of a freezing point higher than one usually associated with genuine milk.

Added water of the amounts of 3.5% and 3.6% were disclosed in two samples of milk.

3. Samples Other Than Milk.

The 138 samples "other than milk" were mainly foods or constituents used in the preparation of food and comprised 17 informal and 121 formal samples from 39 different commodities. Adverse reports were received in respect of 13 samples. Particular attention was given to foods manufactured, packed or prepared for sale in Westmorland.

Classification of Samples.

Nature.	Satis-factory.	Indicating some Irregularity.	Total.
Sausages	26	5	31
Meat Products	7	—	7
Fish Products	8	—	8
Ice Cream	13	—	13
Other pre-packed food ...	66	6	72
Other non-pre-packed food ...	1	2	3
Articles of a medicinal nature ...	4	—	4
	125	13	138

Samples disclosing irregularities were:—

Article.	Nature of Irregularity.
Pork Sausage ..	Deficient in meat content to the extent of 3.0%.
Pork Sausage ..	Deficient in meat content to the extent of 5.8%.
Pork Sausage ..	Deficient in meat content to the extent of 5.9%.
Pork Sausage ..	Deficient in meat content to the extent of 6.0%.
Pork Sausage ..	Deficient in meat content to the extent of 18.5%.
Rum Butter ..	Containing fat other than butter fat.
Rum Butter ..	Containing fat other than butter fat.
Rum Butter ..	Containing only 0.54% rum.
Rum and Butter Candy	Misleading label in that the product does not contain rum.
Chocolate Rum Truffles	Containing only .35% rum; should be described as "Chocolate Rum Flavoured Truffles."
Rum and Butter Toffee —Rum Flavour Rum Flavour—Rum Truffles ..	Ambiguous description.
Deep Browned Beans with Tomato Sauce and Pork	Containing only 2% Pork.

4. The following table gives a summary of the price and meat content of sausage samples based on information supplied, on request, to the Ministry of Agriculture, Fisheries and Food each quarter. It does indicate that the quality of sausages is satisfactorily maintained in Westmorland.

Based on	Range of Meat content.	Range of prices per lb.	Average Meat Content.	Average Price per lb.
17 Samples of Pork Sausage ..	53.0% to 73.0% ..	2/6 to 4/3 ..	65.7%	2/11½d.
14 Samples of Beef Sausage ..	49.3% to 87.0% ..	1/- to 3/- ..	60.7%	2/1d.

5. **Prosecutions.**

Number of Persons Charged.	Nature of Charge.	Result
1 ...	Selling rum butter not of the quality demanded, in that it contained only 0.5% rum ...	Charge dismissed.

6, **School Milk.**

Samples have been obtained from 43 deliveries of milk at 39 schools. The samples are sent for examination by the Department of Pathology, Public Health Laboratory Services and the results of the tests applied are summarised as follows:—

Classification.	Pasteurised. Bottled.	Pasteurised. Bulk.	T.T. Bottled	T.T. Bulk.	Undesignated. Bottled.	Undesignated. Bulk.	Total.
Satisfactory	3	—	4	—	4	14	25
Unsatisfactory	—	—	1	—	1	10	18
	—	—	—	—	—	—	—
	3	—	11	—	5	24	43
	—	—	—	—	—	—	—

The samples classified as unsatisfactory failed to pass on the Methylene Blue test. All samples were satisfactory on the Cavy Inoculation test.

7. **Pharmacy and Poisons Act, 1933.**

Shopkeepers are permitted to sell certain poisons provided they have registered with the local authority for that purpose and observe the conditions governing the sale of poisons. The forms in which such poisons are commonly retailed from shops, other than chemists' shops, are household ammonia, sheep dips, horticultural sprays, insecticides, disinfectants, rat and mouse poison, hair dyes and paint removers. Certain arsenical and mercurial poisons may only be sold to persons who are engaged in and require the article for the trade or business of agriculture or horticulture.

The number of persons listed as sellers of Part II poisons is 183, and attempt has been made to ensure that each seller is familiar with at least those provisions of the poisons rules which apply to the articles exposed for sale.

A quarterly examination has been made in respect of Poisons Registers which are required to be kept by listed sellers of nicotine, arsenical, mercurial and other poisons.

It was found necessary to direct the attention of 5 traders to the provisions of the Poisons List and the Poisons Rules.

Food Labelling.

Most pre-packed foods are now required to be labelled with a statement of ingredients and the name and address of the manufacturer or packer in addition to an indication of the weight or measure of the contents. The accuracy of such statements checked on all articles submitted for analysis under the Food and Drugs Act, and examinations are made when carrying out the provisions of the Sale of Food (Weights and Measures) Act, to ensure that those products which require to be labelled are in fact labelled in a proper manner. The number of packages examined during the period under review was 3,381 arising from which 7 infringements were noted and these were corrected at the time of, or shortly after, the Inspector's visit to the premises.

A. BRYANT,

Chief Sampling Officer.

CANCER TREATMENT

The following details have been supplied by courtesy of the Lancaster and Kendal Hospital Management Committee :—

Number of Clinics held at Kendal during the year ending 31st December, 1956		12
,, new cases seen		52
,, follow-up cases seen		169

The only duty now remaining to the County Council under the Cancer Act concerns the prohibition of advertisements relating to the treatment of cancer and to the sale of articles for use in the treatment thereof. The actual treatment of this condition now forms part of the general hospital and specialist services which it is the duty of the Regional Hospital Boards to provide.

Deaths from Cancer, 1955 and 1956

	1955.			1956.		
	Males.	Females.	Total.	Males.	Females.	Total.
Urban Districts	33	36	69	25	39	64
Rural District	31	31	62	36	43	79
Grand Total ...			131	Grand Total ...		143

TUBERCULOSIS.

In the following table are the figures for the notifications of, and deaths from, Tuberculosis in 1956:—

Age Periods.	New Cases				Deaths			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1	—	—	—	—	—	—	—	—
1	1	—	—	—	—	—	—	—
5	—	1	1	1	—	—	—	—
15	—	1	—	1	—	—	—	—
25	6	5	—	—	3	1	—	—
35	4	3	—	—	—	—	—	—
45	8	2	1	—	5	—	1	—
55	5	1	—	—	—	—	—	—
65	2	—	—	—	3	—	—	—
75	1	—	—	—	—	—	—	—
TOTAL	27	13	2	2	11	1	1	—
1955	28	13	5	8	6	3	—	—

In 1956 Westmorland patients were admitted to the following Hospitals:—

Westmorland Sanatorium, Meathop	31
High Carley, Ulverston	13
Longtown Infectious Diseases Hospital, Carlisle	1
Ormside Infectious Diseases Hospital	1
Beaumont Hospital, Lancaster	5
City General Hospital, Carlisle	5
Cumberland Infirmary, Carlisle	1
Blencathra Sanatorium, near Threlkeld	3
Wrightington Hospital, near Wigan	2
Shotley Bridge, Durham	2
Lancaster Moor Hospital	1

TUBERCULOSIS SCHEME

The Tuberculosis work of the County is now divided between the Manchester and Newcastle-upon-Tyne Regional Hospital Boards, the former being responsible for Kendal Borough, Windermere Urban District, Lakes Urban District and South Westmorland Rural District, whilst the latter is responsible for Appleby Borough and North Westmorland Rural District.

The co-ordination of the prevention and treatment aspects of the tuberculosis problem is secured through the arrangements made by the Local Health Authority under which the Consultant Chest Physicians employed by the Manchester and Newcastle-upon-Tyne Regional Hospital Boards act as the Council's Tuberculosis Officers for the parts of the County falling under their jurisdiction for diagnostic and treatment purposes.

The Chest Physicians give general directions to the work of the Tuberculosis Visitors, and on their recommendation the Authority provides extra milk to necessitous cases, and open-air shelters where the housing circumstances and the condition of the patient warrants it.

The County Council has also agreed to accept financial responsibility for cases where admission to a rehabilitation colony or village settlement is recommended by the Tuberculosis Officers, and for patients living in and near Kendal an Occupational Therapy Scheme is

in operation, under which patients have the advice of an instructor employed by the Local Health Authority and are enabled to purchase materials at concessionary rates.

Since 1949 B.C.G. vaccination has been available under arrangements with, and on the advice of, the Chest Physicians to contacts who appeared particularly susceptible to the disease, and during 1956 87 contacts were tested, of whom 28 were vaccinated.

During the Spring of 1955 it was found possible to commence the B.C.G. Vaccination of Schoolchildren between their thirteenth and fourteenth birthdays in accordance with the suggestions of Ministry of Health Circular 22/53. It was felt desirable in the first instance to make a commenmenment in Kendal, and after experience of this pilot scheme arrangements were begun to extend the arrangements to the whole county.

Owing to the fact that the tests must be read at 72-hour intervals and that for practical purposes the actual vaccination can be carried out only on Thursday, owing to the restricted life of the vaccine, the arrangement of a programme of this work so that it does not interfere seriously with outher arrangements such as regular clinics, Committee meetings, etc., nor clash with school holidays, functions and examinations, is a matter of the utmost difficulty, and has become increasingly so with the advent of the poliomyelitis vaccination campaign. In fact, owing to the effect of the latter scheme on the work of the department, it was not possible to complete the B.C.G. Vaccination of all children in respect of whom the parents gave consent in the Spring of 1956, until over one year later.

The following table gives details of the work done under the scheme, including th results of th post-vaccination tests, although in many cases this stage was completed after the end of 1956.

Found positive at first Pre-vaccination Test.	Found positive at second Pre-vaccination Test.	Vaccinated.	Converted to positive at Post-vaccination Test. (Successfully vaccinated.)
48	63	326	301*

*In no case was any child who had been vaccinated found not to have been converted, but 25 children failed to attend for subsequent testing.

The service in the South of the County is under the control of Dr. J. Munro Campbell, Physician Superintendent of Meathop Sanatorium, with whom the Health Department has had a long and happy association, and is centred on the Kendal Chest Clinic. In the North the service is administered by the Special Area Committee for Cumberland and North Westmorland, who have appointed as Consultant Chest Physician Dr. W. Hugh Morton, whose work is centred on the Chest Centre, City General Hospital, Carlisle, and with whom a close association has rapidly developed, to the great benefit of all aspects of the work.

Extracts from the reports of the two Tuberculosis Officers on the work in that part of the county falling within their respective districts are given below.

NORTH WESTMORLAND

Introduction.

Our statistics for 1956 reveal that it is in the field of treatment that we have most grounds for satisfaction.

The number of cases remaining at the end of the year who are in an infectious state again shows an appreciable decrease.

The decrease in the number of new cases of pulmonary tuberculosis noted in previous years has been halted and statistics for 1957, up to the time of writing this report, even suggest that this figure will again rise.

Tuberculosis as a problem is not yet solved. It is merely wishful thinking to believe that the disease is at last fully controlled, and the view of some Regional Hospital Boards that the disease has ceased to be a problem of the future and that no money should be spent on further developments in the chest service must be strongly condemned. The new problems facing us are such that, if we are to cope with these satisfactorily, the chest centre facilities will have to be increased.

Whilst waiting lists for admission to hospital of cases of tuberculosis remain at a low level, the small number of beds available for the investigation and treatment of non-tuberculous pulmonary conditions becomes more acute from year to year. The demand for urgent admissions for acute non-tuberculous pulmonary disease is very much greater than it is for tuberculosis itself.

As in previous years, a short section on non-tuberculous diseases of the chest is appended, but the brevity of this section must not be interpreted as an indication of its relative unimportance. Chest diseases, other than tuberculosis, are responsible for both a higher morbidity and a higher mortality in the community than tuberculosis and the investigation and treatment of these diseases continues to take up the biggest proportion of our time and facilities.

Notifications.

In the East Cumberland area in 1956 notifications for the pulmonary type of the disease dropped from 139 to 125 and the notifications of non-pulmonary disease dropped from 31 to 19. This decrease was general throughout the area; in the North Westmorland area the new pulmonary cases fell from 9 to 8, whilst in the County of Cumberland area the corresponding figures were 56 and 54, and in the City of Carlisle 74 and 63.

It will be noted that this decrease is much less than noted previously in 1954, when the total number of new pulmonary cases for the whole area was 170. At the time of writing this report—May, 1957—the number of new cases seen to date during 1957 shows an appreciable increase on any similar period during the past five years; and one indeed wonders whether one has not reached the position of stalemate as far as this figure goes. There is no doubt but that many of our new cases have failed to avail themselves in the past of either consulting their own doctors or of visiting the mass radiography unit, and we all know that there is a considerable infective pool in the community still undetected and unrecognised.

The mass radiography unit allotted to the Special Area has continued its operation throughout the year. One short period was spent in co-operation with other Newcastle units in the Gateshead area in the spring and somewhat interrupted our programme locally, but its value as a case-finding measure remains unimpaired. Regular and intensive factory and public session surveys have continued and have contributed much to allaying the fears of patients and to breaking down their hospital complex. Many of our new cases would have otherwise remained undetected had they not passed through the unit.

Now that therapeutic methods of greater efficacy are known the obligation to detect tuberculosis wherever it may be, whether in the lungs, or in the bones, or in the cervical glands, and to the restore the diseased person to health and thus prevent infection to other people, is more binding than ever. Much of this obligation is borne by our profession. Where a patient does not consult his doctor and fails to take advantage of a mass radiography examination, the disease will spread. There is still much ignorance amongst the general public about tuberculosis. In spite of quite extensive propaganda many sections of the public, particularly in the older age groups, remain largely apathetic.

There is still a considerable unknown pool of infectious disease in the community. Although modern diagnostic methods have contributed largely to the finding of early disease, experienced chest physicians, particularly those concerned in the running of a mass radiography unit, cannot fail to be impressed by the frequency with which one finds cases of extensive chronic disease previously unrecognised. There is no doubt that the value of any mass radiography survey lies partly in offering all such persons prompt and adequate

therapy and removing them as a source of infection from the local community. In spite of all our efforts the number of new cases remains at much too high a level. In this area a graphic record these cases over the past five years suggests that this level will remain stationary unless there is re-orientation of outlook in responsible quarters.

The assessment of cases of pulmonary tuberculosis as active continues to be a major part of our chest centre work. When asymptomatic bacteriologically negative lesions are detected by X-ray examination, and when the X-ray appearances are consistent with inactive disease, the clinician cannot dismiss the findings as of no consequence. A formal schedule of periodic examinations must be carried out and continued so long as a lesion remains which is thought to be capable of re-activation.

Pleurisy with effusion is in many cases of tuberculosis ætiology even though a parenchymal lesion cannot be demonstrated after the effusion has disappeared. As pulmonary tuberculosis is now appearing more often in the older age groups, thorough investigation of all pleural effusions, including paracentesis, is more necessary than ever so as to distinguish those of tuberculosis ætiology particularly from the increasing number of effusions associated with neoplasm. A certain number of cases of erythema nodosum are regarded in this country as evidence of a tuberculous infection. Probably the most frequent cause of this condition is sarcoidosis, but whether the ætiology be tuberculous or sarcoid, full investigation of the chest is required.

Diabetes Melitus definitely predisposes to tuberculosis—hence special care to exclude tuberculosis in all such patients is necessary. The administration of Cortisone and its derivatives, especially for prolonged periods, is an important item of history, because such treatment may re-activate a latent lesion.

I must, unfortunately, again stress the importance of notifying cases of active non-pulmonary tuberculosis when these are first seen. I called attention to this in 1954 and again last year, but cases of pulmonary tuberculosis still crop up where we find a relative with a non-notified non-pulmonary tuberculous lesion who has been already under treatment. Bone and joint tuberculosis must in this area be largely due to the human type of bacillus, and when we have no knowledge of such a case we are unable to track down the person responsible for the infection.

Table 1 gives the number of notifications throughout England and Wales for the years 1951 to 1956:—

TABLE 1.

Notifications in England and Wales.

Year.	No. of Notifications.
1951	49,440
1952	41,904
1953	40,917
1954	36,973
1955	34,209
1956	31,642

Table 2 shows the notifications in North Westmorland for 1956 and the preceding five years:—

TABLE 2.

Year.	Pulmonary.	Non-Pulmonary.
1951	9 ...	7
1952	22 ...	4
1953	8 ...	6
1954	6 ...	5
1955	9 ...	4
1956	8 ...	2

The sex and age distribution of cases seen in 1956 are set out in Table 3 and apply to the North Westmorland area only, the figures in parentheses being for the whole of the East Cumberland Hospital Management Committee area, including the Eastern Division of the County of Cumberland and the City of Carlisle.

TABLE 3.

Respiratory Age—	Under 5.	5-15	15-25	25-35	35-45	45-55	55-65	65+
Males	—(3)	—(3)	—(9)	—(11)	2(17)	1(15)	2(15)	1(9)
Females	—(—)	—(2)	1(11)	1(15)	—(5)	—(8)	—(1)	—(1)
Non-Respiratory.								
Males	—(—)	—(1)	—(—)	—(—)	—(—)	—(—)	—(—)	—(—)
Females	—(1)	1(3)	1(4)	—(3)	—(2)	—(3)	—(—)	—(2)

Once again the number of new female cases of tuberculosis in the whole area has dropped and this has involved all age groups, except the 45-55 group. The incidence of the disease in elderly males has however risen, a fact which raises new problems, particularly in therapy.

No less than eight new cases were found in the under 15 age group and one expects to continue to find cases in this group unless the serious gaps in our preventative service—mentioned elsewhere in this report—are corrected.

Recent new cases of tuberculosis have included two school teachers, one nursery assistant and two industrial canteen workers. All staff associated with schools, both teaching and non-teaching, should have at least one annual X-ray examination, and it is depressing to repeat this year after year. Surely the staff themselves should be the first to appreciate the value of such an examination. The danger to the largely unprotected groups of our child population is very great and such an annual examination should be an integral and compulsory requirement for anyone coming in close contact with infants and children in schools and nurseries.

Today the prevalence of active and infectious tuberculosis has so diminished that many people reach adult life without being infected, and the Mantoux test assumes very great significance. A positive test in children merits very careful observation for years. If an infant is found to be Mantoux positive then there is undoubtedly a strong argument for notification and for recommending a course of specific chemotherapy, even in the absence of recognisable tuberculous disease.

Table 4 gives the pulmonary notifications for 1956 and these are further classified as to whether they are infectious or non-infectious, and also the extent of the disease which they have on first examination. The figures given apply to the North Westmorland area whilst the figures in parentheses again refer to the whole of the East Cumberland area.

TABLE 4.

Respiratory.

	R.A. 1.	R.A. 2.	R.A. 3.	R.B. 1.	R.B. 2.	R.B. 3.
Males ...	1(32)	1(18)	—(7)	—(1)	2(10)	3(14)
Females ...	—(16)	—(9)	—(4)	—(1)	1(5)	1(8)
No of above respiratory cases referred by M.M.R.:						
Males ...	1(14)	—(8)	1(2)	—(1)	—(3)	—(2)
Females ...	—(6)	—(2)	—(—)	—(—)	—(1)	—(—)

Deaths.

The number of people whose names were on the Tuberculosis Register for the North Westmorland area and who have died during the year are set out in Table 5 for the years 1951 to 1956:—

TABLE 5.

Year.	Pulmonary.	Non-Pulmonary.
1951	1	1
1952	3	—
1953	2	—
1954	—	—
1955	2	—
1956	5	—

Table 6 gives the number of deaths from tuberculosis throughout England and Wales from 1951 to 1956:—

TABLE 6.

Year.	No. of deaths.
1951	12,031
1952	9,335
1953	7,911
1954	7,069
1955	5,838
1956	4,853

As I have indicated in previous years these tables only give the number of people dying whose names were on the tuberculosis registers and do not indicate that they actually died from the disease. Most of our cases did in fact die from conditions other than tuberculosis, and detailed analysis of the 26 deaths which occurred in 1956 shows that only five of the 26 died from tuberculosis. By far the most common cause of deaths was emphysema with cor pulmonale; in three cases congestive cardiac failure was the actual cause of death, two cases died from carcinoma, one of which was in the colon; two others died from cerebral embolism and two from non-tuberculous pneumonia.

Table 5a shows the number of deaths of patients on the tuberculosis register in 1956 divided into age groups:—

TABLE 5a.

Under 5	5-15	15-25	25-35	35-45	45-55	55-65	65+
—	—	—	3	3	4	7	9

As the older age groups account for an increasing percentage of the new cases seen each year it is only to be expected that in a majority of such cass these patients will die from some condition other than their tuberculosis.

The problem is indeed a very acute one. Active disease in elderly people does often result from the breaking down of a lesion contracted many years earlier, a lesion perhaps which may have been fully investigated and found to be healed and inactive. In other cases, however, there is a strong suspicion that the positive Mantoux test associated with a healed adolescent primary complex has reverted to negative and suggests that in a certain and probably increasing proportion of cases in elderly people active disease may be in the nature of an entirely new infection from without.

Chest Centre Statistics.

Table 7 gives the number of cases of pulmonary and non-pulmonary tuberculosis on the North Westmorland register for 1956. The figures in parentheses in the grand total relate to the corresponding figures for 1955:—

One should note the steady increase in the number of cases of tuberculosis which are under regular supervision. The number of cases with a positive sputum, and therefore infectious, has reached a new low level. It is very satisfying to know that this decrease of infectivity has also occurred in the Carlisle City area and in the Eastern Division of the County of Cumberland. Out of a total number of 1,306 cases on the Tuberculosis register at the end of the year only 47 had a positive sputum within the previous six months.

Table 8 gives the statistical summary of the work done at the chest centre during the year in so far as it relates to North Westmorland patients.

These statistics show that there has been an increase in both the number of new cases seen and the number of old cases examined. The drop shown last year in the number of cases attending for collapse therapy has continued. As indicated last year the number of new cases requiring this form of treatment has greatly diminished; on the other hand the number of cases attending for physiotherapy has greatly increased. The smaller number of contacts examined was largely due to our inability to make use of the mass radiography unit for their examination, owing to its stay for one month in Gateshead.

Contact Examinations.

Contact work has been carried out at the chest centre on the same lines as in previous years and the net continues to be spread as widely as possible. In the cases of working patients we have been able to

TABLE 7.

Clinic Register as at the end of 1956.

North Westmorland

	Respiratory.			Non-Respiratory.			Totals.			Grand Totals.
	M.	W.	Ch.	M.	W.	Ch.	M.	W.	Ch.	
Cases on Clinic Register on 1st January, 1956 ..	39	25	2	10	16	8	49	41	10	100 (97)
Additions to Register during 1956 ..	7	3	—	—	1	1	7	4	1	12 (15)
	46	28	2	10	17	9	56	45	11	112(112)
Removals from Register during 1956 ..	10	2	—	2	2	1	12	4	1	17 (12)
Number of cases on Register on 31st December, 1956 ..	36	26	2	8	15	8	44	41	10	95(100)
Number known to have had a positive sputum within the preceding six months ..	—	—	—	—	—	—	—	—	—	— (2)

TABLE 8.

CHEST CLINIC STATISTICS.

North Westmorland.

	R.	N.R.
1. No. of NEW cases seen:		
Adult male	58	—
Adult female	48	—
Male child	9	—
Female child	2	1
2. No. of OLD cases seen:		
Adult male	120	10
Adult female	96	17
Male child	28	8
Female child	6	5
3. No. of NEW contacts seen:		
Adult male	44	—
Adult female	63	—
Male child	39	—
Female child	34	—
4. No. of OLD contacts seen:		
Adult male	4	—
Adult female	13	—
Male child	11	—
Female child	17	—
5. No. of cases seen by Physiotherapist:		
Adult male	1	—
Adult female	14	—
Male child	10	—
Female child	—	—
6. No. of A.P. refills given ...	1	—
7. No. of P.P. refills given ...	62	—
8. No. of E.P. refills given ...	50	—
9. Screenings only	3	—
10. Aspirations	2	3
11. Domiciliary visits	—	—
12. TOTAL ATTENDANCES ...	735	44

examine their fellow workers and we have received very considerable help from employers and welfare personnel of the works concerned.

The number of contacts found to be tuberculous in the whole of the East Cumberland area and notified during the year total eight, compared to seven in 1955.

All negative Mantoux contacts are offered B.C.G. vaccination and once again no case of active tuberculous disease has occurred in a contact who had been previously vaccinated.

Hospital Facilities and Waiting Lists.

Table 9 gives the number of beds available for the treatment of tuberculosis:—

TABLE 9.

Institution.	No. of beds.
Blencathra	74
City General Hospital	19
Longtown Hospital	24
Ormside Sanatorium	22

Table 10 gives the number of cases from the North Westmorland area admitted to institutions for treatment during 1956:—

TABLE 10.

Institution.	Adults.	Children.
Blencathra	3	—
Longtown	5	—
City General Hospital	9	2
Ormside Sanatorium	2	—

As from the middle of December the bed situation in the Carlisle area further deteriorated; we had to give up Ward 18, a ward of 10 beds in the Cumberland Infirmary to the geriatric department and, as a result, the pressure on our beds locally has been, and continues to be, very great.

The waiting lists at the end of the year for all diseases of the chest are set out in Table 11:—

TABLE 11.

Waiting Lists as at 31-12-56.

	Males.	Females.	Total.
(a) For admission to hospital or sanatorium	3	12	15
(b) For admission to Thoracic Units ...	7	—	7
(c) Non-tuberculous conditions	26	18	44

This lack of beds in the Carlisle area does seriously handicap our work. both in tuberculosis and in non-tuberculous diseases. Indeed, pulmonary disease other than tuberculosis usually calls for more urgent admission and it is a sad reflection on our hospital service when we are unable to admit such patients.

In tuberculosis the extent of the pulmonary lesion, whether minimal, intermediate or advanced, is not as important as the age of the lesion when contemplating treatment. Old lesions, large or small, are likely to have produced destructive changes, whereas a lesion of recent origin, even if extensive, may be reversible. Frequent histological appraisal of the results of treatment following resection makes it clear that destructive lesions are likely to require surgery, whereas non-destructive lesions may be arrested and often cured by medical means alone. It is therefore of vital importance in making a diagnosis of active pulmonary tuberculosis to determine which pulmonary segments are diseased and what is the nature of the disease in each. It is much easier to determine this early in the course of the disease while the radiological appearances are prominent. One has to have in mind the probability of resolution of an area of disease; whether collapse therapy can profitably be employed along with chemotherapy or whether final pulmonary resection may be required later.

Having determined this, the programme of treatment is designed not merely to relieve symptoms if these are present, but also to protect a patient from the eventualities of progressive tuberculosis for a lifetime.

Few clinical problems are so complicated, and in former decades few diseases were so illusive and frustrating; now the outlook has altered—there are few diseases which can be treated by so many and varied approaches successfully, when these are combined wisely. We still regard bed rest as necessary during the period of active disease, but since adequate chemotherapy shortens the period of activity, rest therapy can also often be abbreviated and modified in many cases. The amount of bed rest required is determined as the minimum amount needed for a particular patient and this will of necessity vary.

Hospital treatment continues to be recommended for the initial phase of treatment in all cases. Not only does this allow a better opportunity to institute the therapeutic programme, but—and this is most important—it allows for the examination of all home contacts

and their protection with B.C.G. vaccine. All patients with active tuberculosis receive specific drug therapy. We prefer Streptomycin along with Isoniazid. However successful the early results of drug therapy may seem we now recommend that it must be continued for a comparatively long period to ensure its full bacteristatic use. As far as chronic disease is concerned, this will necessitate drug therapy in some form or other for at least 12 months after the sputum has been converted.

The programme of drug therapy as used in pulmonary tuberculosis is in general carried out in extra-pulmonary tuberculosis. Enlarged tuberculous cervical glands are still common and relapses folowing treatment have occurred in one or two cases and we now feel that therapy in the past has been of too short duration.

We have seen little non-pulmonary tuberculosis during 1956. Here, too, specific drug therapy has revolutionised treatment and, indeed, the treatment of such lesions as renal tuberculosis, endometrial tuberculosis, salpingitis, etc., has become largely medical, the surgeon being called in just as in pulmonary disease when gross residual cavitating diseases, or abscess, remains after drug therapy.

I would comment briefly on the diminishing numbers of patients who attended at the chest centre for collapse therapy refills. Collapse therapy is essentially a means of providing additional rest to the diseased lung, and in choosing the type of collapse therapy needed one takes the method which (a) entails the least risk of complications; (b) which compromises the pulmonary function to the least degree; and (c) which will lead to the desired goal, either a final lasting result in itself or as an intermediate step towards eventual pulmonary resection. One of the principal objects of collapse therapy has been, and is, the closure of cavities. A good pneumonthorax will only collapse the diseased segment and, if it has not attained the object of cavity closure and a negative sputum, one would consider pulmonary resection or another type of collapse therapy for a patient still not fit for surgery. Now that we have excellent surgical facilities we recognise that in many cases resection will be necessary and, therefore, the number of cases for which we would consider pneumothorax therapy has diminished. Pneumoperitoneum is a relatively safe operation, and whilst it is often used as the only form of collapse to be maintained until a cure is obtained, we still carry it out as a temporary expedient when the pulmonary disease is con-

sidered too acute for pulmonary resection—the latter being anticipated at a later date.

We do not now continue a pneumothorax for longer than 12 months and, indeed, many of our recent inductions have only been continued for half this period. We also no longer have the phrenic nerved crushed after the induction of a pneumoperitoneum, as we now recognise that although we get a spectacular "collapse" result there is considerable loss of respiratory function and pulmonary resection yields results which are more predictable. The complete reversibility and control of a pneumoperitoneum permits its use in patients with marginal respiratory function, whether due to previous collapse, resection or extensive destructive lesions. One advantage of a pneumoperitoneum is that a patient with an effective pneumoperitoneum can tolerate more physical capacity than if he had none and can, in fact, remain at work.

One should also mention the treatment of the persistent chronic cavity by postural retention. Unfortunately, this type of treatment takes many months. In one case a patient was in our ward for two and a half years on this treatment before she was fit for resection.

The operation of thoracoplasty has markedly declined in popularity and it is very infrequently used today. This operation produces a considerable permanent reduction in the respiratory capacity and we now recognise that any procedure designed purely and simply to reduce respiratory movement is bad treatment.

Selective collapse on an upper lobe lesion by extra-pleural pneumothorax has been done on several of our cases. Minimal impairment of pulmonary function is produced and it is usually selected for patients with limited respiratory reserve. There is no difficulty in continuing such a pneumothorax, but the difficulties arise when termination is considered advisable. The decision to terminate in such a case is not an easy one and the question of further surgery is likely to arise. Our view is that one individual patient should only have one major thoracic operation in his lifetime, and hence we seldom now recommend an extra pleural pneumothorax.

Chemotherapy alone, chemotherapy with collapse therapy, or chemotherapy with pulmonary resection, depending on the stage of the disease, offers the nearest approach to complete cure. Careful evaluation of the respiratory and circulatory functions is necessary beforehand. The prospective life span during which relapses occur

is so long in young persons that radical treatment should be undertaken. A patient of 65 years of age not only faces a shorter life expectancy than one of 20, but he often faces a more secure leisurely existence. Chronological age and physiological age are not consistent in many patients, and in diabetics every effort is made to remove destructive lesions.

Whenever pulmonary resection is contemplated one has to remember that in most cases the disease has been more widespread initially than can be demonstrated radiologically at the time of operation. The value, therefore, of radiological examination, especially in relation to the individual pulmonary segments, at the start of treatment will therefore be appreciated. Although clinically the disease may be confined to one area of the lung, tuberculosis is a generalised infection and one cannot disregard foci which may be present elsewhere in the lungs and in other organs. Following operation, therefore, medical treatment adequate enough to deal with any residual disease and consisting of bed rest, specific drug therapy, and sometimes even collapse therapy, is essential to consolidate the spectacular gains of pulmonary resection. Inadequate medical treatment following operation may have permanent disastrous results.

Rehabilitation.

Rehabilitation Panels continue to be held monthly at the chest centre. This problem exists for many of our patients and we must assist our patients in procuring any advice and training for a life free from stress and strain, yet adequately productive.

The need for rehabilitation is in direct proportion, not so much to the extent of the disease which a patient has, but to the length of time that patient has had the disease, and successful rehabilitation depends largely, therefore, on early diagnosis.

Modern treatment today often continues after a patient has been discharged from hospital and, indeed, even after he is considered fit to resume work. In some cases we would consider it inadequate if we did not insist on drug therapy for 12 months after a patient's discharge from hospital. Some patients, too, attend for collapse therapy at weekly intervals, thus allowing them to return to work with a greater margin of safety than if they had no artificial collapse. All patients are re-examined at approximately three-monthly intervals and in this way an attempt is made to detect any relapse as early as possible.

During the first five years after discharge from hospital energy expenditures of patients are carefully budgeted and adequate physical rest advised. Placing a patient in suitable employment is undoubtedly one method of minimising any tendency to relapse.

The vast majority of our patients who have recovered from tuberculosis are so comparatively slightly handicapped physically that they are able to return to their previous employment, if that employment is considered by us as suitable. To a patient who has been in hospital for some months, return to work acts as a vigorous tonic, and if he can return to his old job there is much less stress and strain associated with it. It is most important, however, that the nature of the work a patient does fits in with his physical condition. His old job may be entirely suited to his mental and physical capacity, but long daily bus journeys to and from work may not only lengthen his working day but may make serious inroads into the daily food budget, so much so that alternative employment has to be considered. In a few cases work previously carried out by a patient is quite unsuitable as, for example, heavy manual work or underground work in dusty conditions.

It is, therefore, only in a comparatively small number of cases in which the necessity arises for us to advise a complete change of employment. The choice of alternative work appears to be much easier for women than for men. During the last six years a large number of female patients have been successfully recruited to the nursing staffs of our hospitals and many of these girls have acquitted themselves with distinction. Some women, however, have no bent for nursing and in these cases training for a commercial carrer in shorthand, typing and bookkeeping has often proved attractive.

In men, however, the problem is much more difficult. Although we have had many male patients trained in alternative occupations it would appear to be becoming increasingly difficult to give such patients a reasonable guarantee that jobs will be found for them locally after their period of training has been completed. For many of the older type of patients, not suitable because of age for training, but all able and eager to work, no work is available on the open market because their physical condition cannot cope and keep up with the pressure of industry. In some cases where the intelligence quotient is low the prospects of employment are greatly determined by the mental condition of the patient and less by his physical capacity.

One must emphasise that the health of patients is governed not only by the working conditions within the factory or store, but also by his living conditions outside the factory. In this area every effort is made by the responsible local authorities to secure better housing for our patients and, indeed, one has the impression that a larger percentage of the new housing programme has been allotted to our patients than in any other chest area.

Other Chest Diseases.

Neoplasm.

The number of cases of pulmonary cancer seen and investigated during 1956 increased by 40 per cent. compared to 1955. This increase has been steady since 1951, and as our diagnostic facilities in 1956 were exactly as they were in 1951 one must accept it that this is a true increase in the incidence of neoplasm. The number of cases considered fit for surgery was 31 per cent.

Many of the cases when first seen presented evidence of an extensive lesion, often associated with abscess and sometimes with disease in the peripheral glands, making it impossible for surgery to be carried out. In the vast majority of cases, however, surgery was contra-indicated because of evidence of gross cardio-vascular degeneration. Indeed, one has the impression that at least in the over 40 age group the incidence of gross cardio-vascular degeneration is higher in persons with pulmonary neoplasm than in patients attending the chest centre with other pulmonary conditions.

Unfortunately, a large number of patients with neoplasm only consult their doctors after symptoms have been present for some considerable time. In this area there would appear to be a high incidence of bronchitis and emphysema, particularly in the over 50 male population, and any exacerbation of pulmonary symptoms is attributed by the patients to these conditions.

Our patients seen for the first time in 1956 can be divided into two distinct categories as far as medical history is concerned. First, in slightly over half of our cases the average length of symptoms before being first seen at the chest centre was three weeks, and in these cases the most common symptom necessitating their seeking medical advice was undoubtedly hæmoptysis. Two of this group were mass radiography pick-ups and had no symptoms, and the longest period with symptoms was seven months, which referred to one patient. The second group involved rather less than half

of our total number of cases and symptoms varied in duration from a minimum of eighteen months to two or more years, the average being three and a half years. Most of our cases had a history of chronic bronchitis, and in no less than eight of this group there was a minimal history lasting ten years. In this second group there is no question but that exacerbation of symptoms which had been present for some considerable time, or even a change in their character, often leads a patient to feel that it is only his bronchitis which is the cause and he fails to secure medical advice.

In 1956 18 per cent. of the total number of new cases were discovered on routine mass radiography examination, and 20 per cent. of these were considered fit for surgery. The number discovered by mass radiography would be greater still if persons over 45 submitted to an annual X-ray examination as a matter of routine. Many of our cases gave a history of having passed through the mass radiography unit three years previously but had not bothered to go again.

The ages of the patients seen vary from 34 to 71, the over-all average being 57. The average age of the male patients was 59, but in the female patients it was 48. The proportion of males to females in the whole group was rather less than 6 to 1, an incidence approximately the same as for the previous year. At the time of writing this report, however, 1957 figures suggest that the incidence in women has increased. In four cases all men, definite neoplasm was accompanied by definite evidence of active tuberculous disease.

In the East Cumberland area there does not appear to be any significant statistical relationship between the incidence of neoplasm and industry. Carlisle is a railway town and although 20 per cent. of our cases were railwaymen the nature of their work in each case varied enormously—clerks, engine drivers, firemen, joiners, etc.

As before, all cases seen are dealt with promptly and have complete investigations, including bronchoscopic examination, carried out, usually within ten days of first being seen. The most common type of growth found is the squamour cell carcinoma; this type undoubtedly carried a better prognosis, as regards survival, than any of the others, but unfortunately in women the other types predominate and, hence, the outlook is much worse than in men.

A case considered suitable for surgery is invariably transferred to the thoracic unit within two weeks of first being seen. I mention these facts specifically as there has quite recently been considerable criticism in the London area of the average delay between the first attendance of a patient at the chest centre and his being seen by the thoracic surgeon; indeed, one surgeon, whose article has received wide publicity, puts the average delay in his unit at three to eight months and expresses the opinion that "although these delays are not really a matter of surprise, they are a matter of great concern." I thoroughly agree that an average delay of three to eight months would be of great concern to us, if this occurred in this area. I would say, however, that this particular surgeon is most unfortunate in the chest clinic facilities available in his area.

The diagnosis of pulmonary neoplasm is not an easy matter and often demands time-consuming and concentrated investigations. Whilst bronchoscopic examination with biopsy will confirm the diagnosis in a large percentage of cases, other investigations such as tomography, bronchography and examination of sputum for malignant cells are carried out at the same time.

I would particularly draw attention to the laboratory examinations of specimens of sputum for malignant cells. This type of investigation demands a very high degree of technical skill and the interpretation of the microscopic appearances of any cells found requires very special training. Indeed, in some parts of the world, for example in the United States, special laboratories have been set up which only undertake this type of work. We are particularly fortunate in our laboratory facilities in this area and the increasing number of sputums positive for malignant cells in doubtful cases of pulmonary neoplasm which we are getting is undoubtedly an index of the very expert investigation of these specimens in the laboratory. Too often are we inclined to take sputum examinations for granted, and it is a pleasure to be able to pay this tribute to our colleagues in the laboratory.

Where surgical treatment has been contra-indicated radiotherapy has been used, chiefly to relieve symptoms. Lung tumours show wide variation in their sensitivity to radiotherapy and only in a few is this treatment justified by the relief afforded. There is, unfortunately, no evidence that even with radiotherapy the duration of life is prolonged.

The number of cases of neoplasm surviving the three-year period after diagnosis remains very small. Pneumonectomy affords the

only reasonable hope of survival. We must continue to emphasise to the general public the necessity to consult their doctors at the earliest opportunity after warning symptoms appear. Such symptoms are unaccustomed cough, increasing dyspnœa, hæmoptysis, pain in the chest and loss of weight, all of which merit immediate investigation.

Bronchiectasis, etc.

The following table shows the number of cases of bronchiectasis on our active register at the end of 1956:—

	North Westmorland.		
	M.	F.	Ch.
Cases on Register, 31-12-55 ...	16	5	4
New cases during 1956 ...	—	1	—
Total on Register, 31-12-56 ...	15	6	4
No. of attendances for physio-therapy	1	14	10

Treatment consists of physiotherapy and antibiotics and, in general, provided we have the full co-operation of the patient, or, in the case of a child, of his parents, the results have been good. In only a few cases have we submitted a patient to the thoracic surgeon for surgical treatment.

Pulmonary atelectasis is of frequent occurrence in children apart from bronchiectasis and is often associated with the exanthemeta, particularly measles and whooping cough. It is also found frequently with upper respiratory catarrhal infections, and here again full use is made of our physiotherapy facilities. Four cases occurred in one week of atelectasis following the inhalation of a peanut in a young child. As distinct from the first type of atelectasis mentioned, peanut atelectasis means immediate bronchoscopy with removal of the foreign body, and these children were transferred immediately to the thoracic unit for this.

Many young children have asthma and bronchitis; these children are all greatly benefitted by breathing exercises. Altogether our demands on the physiotherapist have greatly increased; we have now six sessions per week and the pressure of work is such that a full time appointment cannot long be delayed.

Chronic bronchitis and emphysema is a disease of the older age groups and causes considerable morbidity in this area. Considerable investigation is necessary and in the small number of patients we

have been able to admit for investigation and treatment some alleviation of their symptoms has been obtained.

In this area bronchial infection is possibly the biggest factor in the development of chronic bronchitis and, unlike the larger cities, atmospheric pollution must be relatively unimportant. It should be noted that smoking exerts a very irritant effect on the bronchi in these cases and abstinence does help.

Sarcoidosis.

An increasing number of cases of sarcoidosis have been seen during the past year. The ætiology of this disease is still doubtful, but in most cases the primary site of the disease is found either in the lungs or in the mediastinal lymph nodes. The disease often affects the eye and an increasing number of cases of erythema modosum have been found to be associated with it.

Mass Radiography.

(NOTE.—Figures given in parentheses throughout the report relate to the corresponding figures for 1955.)

Our programme in 1956 was arranged so that rather more time would be spent in West Cumberland than in East Cumberland. It was also intended because of shortage of technical staff that we would close down the unit for a full month in July-August to allow of the necessary holiday leave to the staff. Unfortunately, however, our local programme was seriously interrupted when our unit was taken across to take part in a survey in Gateshead in May. As this period of four weeks was a vital period so far as our own programme was concerned we decided to continue operations throughout the summer, but even so the programme in West Cumberland had to be drastically curtailed. This was unfortunate, but the current programme in 1957 will largely correct this.

Groups Examined.

In addition to carrying out surveys at works and factories, surveys of the general public were carried out on 30 occasions; 2,675 (3,814) contact cases were X-rayed, 1,545 from the East Cumberland area and 1,130 from West Cumberland.

Facilities for X-ray examination were again made available for all school children over the age of 13, these examinations being complementary to the Mantoux testing and B.C.G. vaccination schemes of the local authorities; 8,775 (9,757) children of these age groups passed through the unit.

Sessions were held for members of the general public in 24 (29) towns and villages in the Special Area and 20,397 (20,125) persons passed through the unit.

The full co-operation of the general practitioners was again invited in the areas visited as in previous years. The number of persons referred directly by general medical practitioners did, however, diminish, as did also the number of ante-natal cases referred.

During the survey in Gateshead 2,014 persons were X-rayed by the Unit and nine persons were found to be suffering from active tuberculosis. These figures are not included in the tables which follow.

Results.

Excluding the Gateshead survey 48,420 (49,629) persons were examined by the unit during the year. These included 1,223 (1,177) inmates of Dovenby Hall and Garlands Hospitals. Excluding the mental patients 47,197 (48,452) civilians were examined.

Table 2 gives a detailed analysis of the work of the Unit for East Cumberland and North Westmorland.

Number recalled for full-sized X-ray film: 2,236—4.62% of total examined (2,214—4.46%).

Number referred for clinical examination: 550—1.14% of total examined (521—1.05%).

Number failing to attend for full-sized film: 170—7.6% of those recalled (193—8.72%).

The number recalled for clinical examination included all persons presenting radiological evidence of possible active pulmonary tuberculosis, cases of bronchiectasis, particularly those in the under 35 age groups, all neoplasms, many cases of cardio-vascular abnormality, cases of pneumoconiosis and other cases where the radiological picture suggested sarcoidosis or one of the collagen diseases.

It will be noted that the number of persons failing to attend for large film examination at the unit has decreased. The vast majority of these non-attenders have taken advantage of further appointments at the local chest centres. In the East Cumberland area, for example, 93 per cent. actually attended at the chest centre after failing to attend at the mass radiography unit. In practically all such cases the person recalled had been unable to keep the first appointment because of difficulties at work or some domestic incident or, more often, because he had been on holiday.

The detailed results of the X-ray examinations are shown in Table 1.

TABLE 1.

	Number of cases found.		Percentage of total examined.	
Abnormalities revealed:				
(1) Non-Tuberuculous conditions:				
(a) bronchiectasis ...	52	(63)	.01	).13)
(b) pneumoconiosis ...	64	(83)	.13	(.17)
(c) neoplasms ...	10	(11)	.02	(.02)
(d) cardio-vascular conditions	413	(433)	.82	(.87)
(e) miscellaneous ...	822	(398)	1.69	(.80)
(2) Pulmonary Tuberculosis—				
(a) active ...	82	(94)	.17	(.19)
(b) inactive ...	596	(757)	1.23	(1.53)
(c) active (previously known)	20	(17)	.04	(.03)

TABLE 2.

Source of Examination.	Miniature Films.	Large Films.	Clinical Exams.	Active T.B.	Inactive T.B.	Bhronchiectasis	Neoplasms.	Pneumoconiosis.	Cardiac Conditions.
Source of Examination.									
Doctors' cases ...	146	38	10	2	6	2	1	—	9
Ante-natal cases ...	94	3	1	—	1	—	—	—	—
Contact cases ...	1,545	83	18	2	32	3	—	—	19
Scholars ...	5,209	161	18	—	12	2	—	—	2
School staff ...	351	19	2	—	6	—	—	—	4
General public ...	13,559	833	192	25	165	19	5	3	235
Surveys ...	6,889	325	80	3	77	9	2	—	57
Mentally defective patients ...	884	77	—	14	39	2	—	—	34
Totals ...	28,677	1,539	321	46	338	37	8	3	360

Disposal.

1. **Pulmonary Tuberculosis.**

Mass radiography surveys are essentially part of the case-finding measures in a properly instituted tuberculosis control scheme. This elementary fact is often lost sight of by those who appear to regard a survey as an end in itself. To be complete, surveys should list the final number of true positive cases identified and also the effectiveness of the tuberculosis programme in terms of cure or control at the end of a five or a ten-year period. Even when a finding of pulmonary tuberculosis has been made on radiological grounds, deciding whether a lesion is active or inactive is often a more difficult problem. Frequent large film and clinical examinations may be necessary, sometimes over a period of months. In borderline cases there may often be considerable variation recorded in the findings of individual observers. One should, therefore, in Table 2, note not only the figures for new cases of active tuberculosis but also when an inactive lesion was found. Added together, in East Cumberland there were 384 cases of active and inactive tuberculosis and in West Cumberland there were 314 cases. It is suggested that these composite figures give a truer picture of the tuberculosis problem as it exists in both areas.

The final number of sputum positive cases identified is also most important and Table 3, which refers solely to East Cumberland, shows this as a percentage since the unit started operating in 1951. The only comparable figures I have seen relating to West Cumberland refer to 1955 when the new cases of pulmonary tuberculosis discovered numbered 214 and of these 14 per cent. had a positive sputum.

TABLE 3.

Year.	Total number of new cases of pulmonary tuberculosis.	Total number with positive sputum.	Percentage of new cases with positive sputum.	Percentage positive sputum cases found by M.M.R.
1951 ...	148	57	39%	23%
1952 ...	221	91	41%	22%
1953 ...	140	45	32%	20%
1954 ...	170	56	33%	13%
1955 ...	139	42	30%	21%
1956 ...	125	39	31%	18%

2. **Bronchiectasis.**

All cases of bronchiectasis were fully investigated at the chest centres. Full use is made of the physiotherapy facilities and in suitable cases treatment is carried out in collaboration with the thoracic surgeon.

3. **Cardio-vascular Conditions.**

The investigation of cardio-vascular abnormalities takes up an increasing quota of the time spent in investigating pulmonary disease. The vast majority of these cases are associated with hypertension but an increasing number of congenital cardiac defects have been found during the year.

4. **Neoplasms.**

The number of pulmonary neoplasms discovered by the mass radiography unit remain steady, the total being 10, with eight in East Cumberland and two in West Cumberland. In East Cumberland a total of 29 cases were seen at the chest centre and investigated. There is no delay either in their investigation or in their treatment, and admission to Shotley Bridge Hospital in operable cases usually takes place within 10 days of the patient first being seen.

5. **Pneumoconiosis.**

As in previous years practically all the cases found are located in the West Cumberland area and most of these are in iron ore industry. The three cases seen in East Cumberland were in coal miners.

6. **Other Conditions.**

Many other abnormal conditions were discovered, some of which merited considerable investigation either at the chest centres or in other departments of the hospital service.

Comments.

As already indicated, the four weeks spent in Gateshead disorganised our programme in the Special Area. Survey time-tables require to be prepared many months in advance and it is not an easy matter to alter a time-table at comparatively short notice, particularly in factory surveys. Some factories can only co-operate in our surveys during their slack periods. Contact examinations require

considerable planning beforehand in order to avoid any duplication of work either at the unit or the chest centre. The Gateshead survey interfered particularly with these two groups.

It is generally agreed that mass radiography surveys are not now of significant value in a case finding measure in children, but we have continued these surveys of school children as we have felt that their educational value is important. It is, too, particularly valuable as a concomitant part of the measures leading to B.C.G. vaccination in school leavers. The position as far as school staff is concerned is still most unsatisfactory, the only local authority which appears to give any encouragement to school staff passing through the unit as school staff is the City of Carlisle. As I have indicated in previous reports I feel very strongly that all school staffs, both teaching and non-teaching, should avail themselves of regular mass X-ray examinations and pass through the unit at the same time as the pupils so that the latter are impressed with the importance of such an examination.

The tuberculosis problem in this area is not yet solved; 82 new cases of active pulmonary tuberculosis were discovered by the mass radiography unit in this area out of approximately 50,000 examinations, and as long as this high rate continues we must continue our mass radiography surveys regularly and persistently. In the United States of America a mass radiography survey is considered well worth while if 40 new cases of tuberculosis are found per 100,000 examinations.

The incidence of pulmonary cancer has again risen during the year, as it has done throughout the country, and it is vitally important that all adults avail themselves of annual X-ray facilities so that as early a diagnosis as possible is made.

We had provisionally arranged to carry out an extensive survey in one of the biggest housing estates in the area during the current summer but have been unable to plan this in detail and will probably have to cancel the whole idea, for this year at any rate, because of a likely shortage of technical staff.

The technical staff problem becomes more acute from year to year. There is a very marked shortage of radiographers throughout the country and it is becoming increasingly difficult to fill vacant posts.

The driver-technician of the unit has also resigned on being appointed to a better-paid post and, at the time of writing this report, the applicants interviewed have all turned down the post because of the low salary. It does appear to be ridiculous that one can only offer a man who must have considerable skill in vehicle driving and maintenance and also in darkroom work a wage amounting to less than £7 a week.

Acknowledgments.

Once again it is a pleasure to acknowledge the valuable help received in the chest centre work as a whole from the staff of the County Medical Officer, and particularly I would express my sincere thanks to Dr. Guy, the County Medical Officer, for his continued valuable co-operation.

W HUGH MORTON,

Consultant Chest Physian.

SOUTH WESTMORLAND

The Chest Clinic in South Westmorland is centred on the Ghyll Head Clinic at the Westmorland County Hospital, Kendal, where sessions are held on Fridays from 11 a.m. to 1 p.m. and from 2 p.m. to 3 p.m., and also on Tuesday evenings from 4-30 p.m. till 6 p.m. Up till the end of the year, Mrs. Williams, S.R.N., had carried out most efficiently all the work in connection with the Nursing and Health Visitor sides of the Clinic, but when she retired the opportunity was taken to change the staffing position, and now the nurse at the Clinic is provided for by the staff of the Westmorland County Hospital, whilst the Health Visitor is from the County Health Department and the clerical work is carried out by a member of the Westmorland Sanatorium staff.

	1951.	1952.	1953.	1954.	1955.	1956.
(1) No. of persons first examined during the year	310	250	296	345	284	376
(2) No. of persons in (1) who were contacts ...	95	61	99	97	89	153
(3) No. of new cases diagnosed as tuberculous ...	43	22	34	26	32	25
(4) No. of cases in (3) who were contacts ...	3	5	3	2	4	6
(5) No. of cases on Clinic Register on 31st Dec. ..	280	286	298	279	263	263
(6) No. of cases in (5) who had positive sputum between 1st July and 31st December ...	39	37	28	17	20	12
(7) Health Visitor's visits:						
(a) to new cases and contacts ...	723	395	185	184	61	139
(b) to old cases ...	1,869	2,021	1,665	1,706	1,716	1674
	2,592	2,416	1,850	1,890	1,777	1,813

From the above table, which covers the general work, there are several interesting points of comparison with previous years. The number of new cases remains relatively low and the total on the Register is the same as last year, but the number of persons first seen (including contacts) has increased appreciably, and I think demonstrates that, in spite of the much improved position in regard to Tuberculosis, the Chest Clinic still fulfils a very useful function. But perhaps the most striking figure is the very much lower number of sputum positive cases during the last six months—a most valuable contribution to the control of the spread of infection, and no doubt in large measure due to the widespread and prolonged use of antibiotics.

In addition to the consultative and supervisory duties of the Clinic, refills are given for A.P. and P.P. cases, and during the year numbered 502. This is a decreasing figure and without doubt will continue in a downward direction as the cases now considered suitable for and needing these methods of treatment are much fewer. No medical treatment is provided at the clinic, though the recommended antibiotics, etc., are referred to the general practitioners concerned.

Though the X-ray set at the Clinic is of rather low power, within its limits satisfactory films can be obtained, and 898 chest films were taken during the year, whilst 1,674 screenings were done.

Mantoux (and multiple puncture) tests are also carried out, and 103 were done during the year. Some of these were for diagnostic purposes and some for B.C.G. requirements. Though the actual number of cases is small—28—the enquiry for infant vaccinations has appreciably increased—quite often through the Maternity Hospital as soon after the birth of the child as possible.

Most of the tuberculous patients requiring treatment are admitted to the Westmorland Sanatorium, but a few go to Beaumont Hospital at Lancaster. Major surgery cases (tuberculosis) are generally admitted to High Carley Hospital, whilst others for major surgery or special investigation may go to Victoria Hospital, Blackpool, or Lancaster Royal Infirmary, under Mr. J. S. Glennie, the Consultant Thoracic Surgeon for the area.

WESTMORLAND SANATORIUM TABLE

	1953.			1954.			1955.			1956.		
	M.	F.	Ttl.	M.	F.	Ttl.	M.	F.	Ttl.	M.	F.	Ttl.
South Westmorland patients in Meathop at 1st January ..	8	9	17	7	4	11	7	8	15	9	3	12
Admissions during year	13	10	23	14	12	26	17	7	24	23	11	34
Discharges during year ..	14	15	29	14	8	22	15	12	27	19	10	29
South Westmorland patients in Meathop at 31 December	7	4	11	7	8	15	9	3	12	13	4	17

Though it would appear from the numbers given that there has been a moderate increase in tuberculosis, in actual fact the demand for beds, as is common to almost all areas, has been low. The Sanatorium as a whole with its 160 beds has during the past six months been down to 100 patients.

In spite of all the new drugs, I still feel firmly convinced that in the large majority of new cases a period of sanatorium control and bed rest is the main factor in establishing the processes necessary to recovery.

As indicated previously the P.P. and A.P. methods of lung control are slowly but definitely being rendered unnecessary, and amongst Westmorland patients only three persons had a P.P. induced and one person an A.P. Where the antibiotics do not in themselves result in sufficient control of the disease, some form of major surgery, segmental resection, lobectomy, thoracoplasty, etc., can often deal successfully with the position.

Of the 29 discharges, two were after convalescence following major surgery, and in nine cases the patients were transferred for major surgery.

Practically all patients admitted were given Streptomycin with P.A.S. or INAH in the first place, with other variations later on. Though at the moment we have a fairly routine "course," this is by no means fixed, and from other sources there still seems much variation in the amounts of Streptomycin, etc., given. There does, however, seem a more unanimous opinion that anti-tuberculosis drugs should be administered over longer and longer periods.

At the time of writing (1957) No. 5 Miniature Mass Radiography Unit of the Manchester Regional Hospital Board is again in the South Westmorland area, the last visit having been in 1954 and the first visit in 1950. It is too early to give figures yet, but there is apparently a reasonable response to the invitation to have a chest X-ray, and the number being referred for further investigation to the Chest Clinic is appreciable, and generally entails some extra sessions.

Mr. J. S. Glennie, F.R.C.S., Consultant Thoracic Surgeon for this area, continues to hold fortnightly sessions at Meathop, when cases from the Sanatorium and from the Clinic can be discussed.

Also Mr. G. Freeman, F.R.C.S., Consultant E.N.T. Specialist, regularly visits the Sanatorium to see new patients and review old cases.

Dental work is carried out by Mr. E. O. Bray, L.D.S., who hold a session each week.

J. MUNRO CAMPBELL,

Consultant Chest Physician.

BOVINE TUBERCULOSIS

The Tuberculosis Order, 1938, is carried out by the Divisional Inspector of the Ministry of Agriculture and Fisheries, in co-operation with the County Police.

During the period 1st January to 31st December, 1956, no animals were slaughtered under the above Order.

MILK SUPPLIES

The Milk and Dairies (Food and Drugs) Act, 1944 which came into operation on 1st October, 1949, and the Regulations made thereunder brought about the following position—

The Minister of Agriculture and Fisheries is now responsible for :—

(i) The registration and supervision of dairy farms.

(ii) The licensing and supervision of producers of Tuberculin Tested and Accredited Milk.

The County Council is responsible for :—

The licensing and supervision of pasteurising and sterilising premises.

The County District Councils are responsible for :—

(i) The registration and supervision of milk distributors and dairies, other than dairy farms.

(ii) The licensing of dealers of designated milk.

The Regulations also laid down detailed requirements in the matters of cleanliness of dairies, milk containers, retail vehicles and milk handlers, as well as methods of sampling and testing milk. The powers of Medical Officers of Health to deal with the problem of milk-borne infectious diseases are also strengthened.

All licences to use the designation " Accredited " lapsed on 30th September, 1954; no new licence to use the designation " Tuberculin Tested " can be granted after that date unless the herd is Attested,

and after 30th September, 1957, all "Tuberculin Tested" licences still in force will apply only to attested herds. This state of affairs already exists in Westmorland.

A further stage in the campaign to secure a safe milk supply was reached with the enactment of the Milk (Special Designations) Act, 1949, which provides that in areas specified from time to time by the Minister, no milk may be sold by retail unless it carries one of the special designations. Westmorland has not, so far, been specified by the Minister.

Licences to pasteurise milk have been granted in respect of one establishment in the County, and routine sampling of the treated milk is carried out by the Weights and Measures Department of the Council.

TREATMENT OF VENEREAL DISEASES

Treatment of Venereal Diseases has now passed to the Regional Hospital Board. The problem of V.D. has never been a large one in Westmorland. The establishment of the Kendal Clinic has had a useful part to play. The journey to Lancaster, Barrow or Carlisle has deterred a number of patients from having regular treatment, with the result that there was an increase in the number of defaulting patients.

Westmorland cases treated at the following Centres for the year ended 31st December, 1956, are as follows:—

New Cases.

Centre.	Syphilis.	Soft Chancre.	Gonorrhoea.	Non-Venereal & undiagnosed conditions.	Total number of cases.
Carlisle ...	—	—	—	1	1
Kendal ...	3	—	2	7	12
Lancaster ...	—	—	1	4	5
	—	—	—	—	—
Total ..	3	—	3	12	18
	—	—	—	—	—

STATISTICAL TABLES

The following tables are a simplified version of the Annual Returns now required by the Ministry of Health :—

MENTAL DEFICIENCY ACTS, 1913-1938

Particulars of Cases Reported during the Year 1956.

Ascertainment

	Males.	Females.	Total.
(a) Cases reported by Local Education Authority :—			
(i) As ineducable	2	2	4
(ii) As needing care and supervision after leaving school	—	—	—
(b) Other cases found "subject to be dealt with"	2	—	2
(c) Other cases ascertained but not "subject to be dealt with" ..	3	3	6
(d) Action incomplete	—	—	—
	—	—	—
TOTAL cases reported during the year	7	5	12
	—	—	—

Disposal of case reported during the Year:

	Males.	Females.	Total.
(a) Ascertained defectives found "subject to be dealt with" :—			
(i) Admitted to Hospitals ...	1	—	1
(ii) Placed under Statutory Supervision	3	2	5
(iii) Died or removed from area	—	—	—
(iv) Taken to "Place of Safety"	—	—	—
(v) Action not yet taken ...	—	—	—
	—	—	—
Total ...	4	2	6
	—	—	—
(b) Cases not at present "subject to be dealt with":—			
Placed under Voluntary Supervision	3	3	6

Care Arranged under Circular 5/52

Admitted to N.H.S. Hospitals ...	5	1	6
Admitted elsewhere	1	—	1
Total ...	6	1	7

Particulars of Mental Defectives on 31st December, 1956.

	Males.	Females.	Total.
(1) Number of Defectives found "subject to be dealt with":—			
(a) In Institutions—			
Under 16 years of age ...	5	1	6
Aged 16 years and over ...	53	43	96
(b) Under Guardianship—			
Under 16 years of age ...	—	—	—
Aged 16 years and over ...	1	1	2
(c) Under Statutory Supervision—			
Under 16 years of age ...	10	8	18
Aged 16 years and over ...	12	12	24
(d) Taken to "Place of Safety"—			
Under 16 years of age ...	—	—	—
Aged 16 years and over ...	1	—	1
(e) Under Voluntary Supervision:			
Under 16 years of age ...	—	—	—
Aged 16 years and over ..	12	13	25
Total ...	94	78	172

TABLE 1.

ANTE-NATAL and POST-NATAL CLINICS

(1)	No. of clinics provided (2)	No. of sessions per month (3)	No. of Women who attended. (4)	No. of women in col. 4 who had not attended a clinic since previous confinement. (5)	Total attendances. (6)
Ante-natal ...	1	4	28	28	194
Post-natal ...	—	—	—	—	—

TABLE II.

DOMESTIC HELPS

(a) Number of Domestic Helps employed at 31st December, 1956:—	
(1) Whole-time	1
(2) Part-time	42
(b) Number of cases where Help was provided :—	
(1) Maternity	43
(2) Tuberculosis	2
(3) Chronic sick, including aged and infirm	169
(4) Others	27

TABLE III.

HOME NURSING

	Medical.	Surgical.	Infectious Diseases.	Tuber-culosis.	Maternal Compli-cations.	Totals.
No. of cases attended during year ...	2,772	884	103	19	17	3,795
No. of visits paid during year ...	59,512	9,866	513	789	155	70,835

TABLE IV.

INFANT WELFARE CENTRES

No. provided	No. of Sessions per month	No. of Children who at first attendance were under 1 yr.	No. of children who attended and who were born in :			Total No. who attended	No. of attendances made by children who at date of attendance were :			Total Attendances.
			1956	1955	1954–51		Under 1 yr.	1-2 years.	2-5 years.	
17	24	397	368	380	616	1,364	3,621	1,335	1,742	6,698

TABLE V.

HEALTH VISITING

No. of children under 5 yrs. visited.	Expectant mothers		Children under 1 yr. of age.		Children 1–2 yrs.	Children 2–5 yrs.	Tuberculous households	Other cases	Total households visited.	Visits to tuberculous households by T.B. visitors
	First visits.	Total visits.	First visits.	Total visits.	Total visits.	Total visits.	Total visits.	Total visits.		
5,062	—	—	801	10,399	6,071	10,369	738	4,600	4,894	1835

TABLE VI.

MIDWIVES' ACT, 1951: RETURN OF LOCAL SUPERVISING AUTHORITY

1. Maternity Cases Attended

(1)	No. of deliveries in the area attended by Midwives during the period:					
	Domiciliary Cases.					
	Doctor not booked.		Doctor booked.		Totals	Cases in Institutions.
	Doctor present at delivery.	Doctor not present at delivery.	Doctor present at delivery.	Doctor not present at delivery.		
Midwives employed by:						
(a) the Authority ..	3	19	56	65	143	—
(b) Voluntary Organisations	—	—	—	—	—	136
(c) Hospital Management Committees	—	—	—	—	—	544
Midwives in private practice ..	—	—	—	—	—	13
Totals ..	3	19	56	65	143	693

No. of cases delivered in Institutions but attended by domiciliary midwives after discharge therefrom before the fourteenth day 624

No. of domiciliary cases in which the infant was wholly breast fed at fourteenth day 89

2. Midwives in Private Practice

(a) Domiciliary	—	
(b) In Nursing Homes...	1	
	—	1

3. Medical Aid under Section 14 (1) of the Midwives' Act, 1951

No. of cases in which medical aid was summoned during the period :—

(a) For Domiciliary cases :—		
(i) Where the Medical Practitioner had arranged to provide Maternity Services under the National Health Service Act, 1946	48	
(ii) Other cases	—	
	—	48
(b) For cases in Institutions		29

4. Administration of Analgesia

(a) Number of Midwives in practice in the area qualified to administer Analgesics :—		
(i) Domiciliary	34	
(ii) In Institutions	18	
	—	52
(b) Number of sets of Analgesic apparatus in use by the Authority's midwives		31
(c) Number of cases in which gas and air was administered in domiciliary practice:—		
(i) when doctor was not present	62	
(ii) when doctor was present	44	
	—	106
(d) No. of cases in which pethidine was administered in domiciliary practice :—		
(i) when doctor was not present ...	19	
(ii) when doctor was present	15	
	—	34

TABLE VII.

AMBULANCE SERVICES

(1)	No. of Vehicles at 31-12-56. (2)	Total No. of patients. (3)	Total No. of journeys. (4)	No. of emergency patients included in col. (3) (5)	Total mileage during period. (6)
Ambulances ...	7	3,037	2,346	322	75,200
Cars ...See below*		17,594	6,865	241	244,703

NOTE :—* The Sitting-case Car Service was provided by voluntary drivers and by taxis.

NOTIFIABLE DISEASES, 1956

	Smallpox	Scarlet Fever	Paratyphoid Fever	Erysipelas	Pulmonary Tuberculosis	Other Forms of Tuberculosis	Acute Pneumonia	Acute Poliomyelitis non-Paralytic	Acute Poliomyelitis Paralytic	Acute Polio-Encephalitis	Dysentery	Puerperal Pyrexia	Ophthalmia Neonatorum	Measles	Whooping Cough	Meningococcal Infection	Food Poisoning	Acute Infect. Encephalitis	Typhoid Fever
Appleby ..	—	1	—	—	1	1	—	—	—	—	—	—	—	1	—	—	—	—	—
Kendal ..	—	2	—	—	20	2	—	1	—	—	117	3	—	523	26	—	2	—	—
Lakes ..	—	1	—	1	1	—	1	—	—	—	—	—	—	25	3	—	1	—	—
Windermere	—	1	1	—	3	—	1	—	—	—	—	—	—	6	1	—	1	—	—
N Westmorland	—	3	—	1	8	1	2	—	—	—	—	—	—	6	18	—	—	—	—
S Westmorland	—	17	—	1	7	—	1	1	—	—	17	2	—	185	15	—	43	—	—
Totals 1956	—	25	1	3	40	4	5	2	—	—	134	5	—	745	63	—	47	—	—
Totals 1955	—	24	—	4	41	13	8	2	3	—	14	2	—	368	76	—	12	—	1

NOTIFIABLE DISEASES (OTHER THAN TUBERCULOSIS) DURING THE YEAR 1956

Ages.	Smallpox.	Scarlet Fever.	Paratyphoid Fever	Erysipelas.	Acute Pneumonia.	Acute Poliomyelitis non-paralytic	AcutePoliomyelitis Paralytic	Acute Polio-Encephalitis	Dysentery	Puerperal Pyrexia.	Ophthalmia Neonatorum.	Measles	Whooping Cough	Meningococcal Infection	Food Poisoning	Acute Infect. Encephalitis	Typhoid Fever
Under 1 year ..	—	—	—	1	—	—	—	—	6	—	—	17	2	—	—	—	—
1-2 Years	—	2	—	—	—	—	—	—	23	—	—	121	7	—	—	—	—
3-4 „ ..	—	4	—	—	—	—	—	—	20	—	—	182	15	—	—	—	—
5-9 „ ..	—	6	1	—	1	2	—	—	57	—	—	397	35	—	4	—	—
10-14 „ ..	—	12	—	—	—	—	—	—	8	—	—	19	4	—	23	—	—
15-24 „ ..	—	1	—	—	2	—	—	—	9	5	—	8	—	—	18	—	—
25 years and over	—	—	—	2	2	—	—	—	11	—	—	1	—	—	2	—	—
Age unknown	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total Cases notified	—	25	1	3	5	2	—	—	134	5	—	745	63	—	47	—	—
Cases admitted to Hospital ..	—	3	—	1	1	1	—	—	4	1	—	2	1	—	2	—	—
Total Deaths ..	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—

NOTE: The deaths shown above are only in respect of cases which have been notified.